

**EFL UNDERGRADUATE STUDENTS' USE
OF GENERATIVE AI CHATBOTS TO FACILITATE
READING COMPREHENSION**

THESIS

Submitted in partial fulfillment of the requirements for the degree of
Sarjana Pendidikan (S.Pd) in English teaching



**UIN SUNAN AMPEL
S U R A B A Y A**

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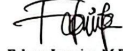
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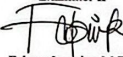
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ABSTRACT

Alya Hanun Putri Wibowo (2026). *EFL Undergraduate Students' Use of Generative AI Chatbots to Facilitate Reading Comprehension*. A thesis. English Language Education Department, Faculty of Tarbiyah and Teacher Training, Islamic State University of Sunan Ampel Surabaya. Supervisor I: Hilda Izzati Madjid, M.A. Supervisor II: Fahmy Imaniar, M.Pd.

Keywords: *EFL Students, Generative AI chatbots, Reading Comprehension, Reading Comprehension Strategy*

In the past several years, there has been a growing interest and awareness towards the use of generative AI (GenAI) chatbots among EFL students and those in higher education. Through its versatile and conversation-based services, GenAI chatbots enable students to study in their preferred ways, one of which is while reading. Although the use of GenAI chatbots for reading has been researched before, previous studies have not delved into detail about its practical application. Therefore, this qualitative case study aims to investigate the GenAI chatbots EFL undergraduate students use and their implementation of reading comprehension strategies through said GenAI chatbots. The data was collected through an open-ended survey and semi-structured interview, involving 34 undergraduate students across four batches from the English Language Education Department (ELED) of UINSA. The findings of this research revealed that there are four GenAI chatbots that students preferred using: ChatGPT for easier reading, Gemini due to its flexibility, Perplexity AI and Meta AI for their practicality. In relation to students' implementation of the reading strategies, it has resulted in the alteration of how some strategies were usually carried out. Depending on which strategy, the extent of the GenAI chatbot's assistance was either just to support or as the one that mainly enacts the strategy. Additionally, students' response to the assistance includes: cross-checking and saving the AI-generated information and engaging further in a discussion with the GenAI chatbot. These findings imply that further pedagogical guidance is needed and that regulations surrounding GenAI chatbot use for learning, notably academic reading, should be established.

ABSTRAK

Alya Hanun Putri Wibowo (2026). *EFL Undergraduate Students' Use of Generative AI Chatbots to Facilitate Reading Comprehension*. A thesis. English Language Education Department, Faculty of Tarbiyah and Teacher Training, Islamic State University of Sunan Ampel Surabaya. Supervisor I: Hilda Izzati Madjid, M.A. Supervisor II: Fahmy Imaniar, M.Pd.

Kata Kunci: *Siswa EFL, Generative AI chatbots, Pemahaman Membaca, Strategi Pemahaman Membaca*

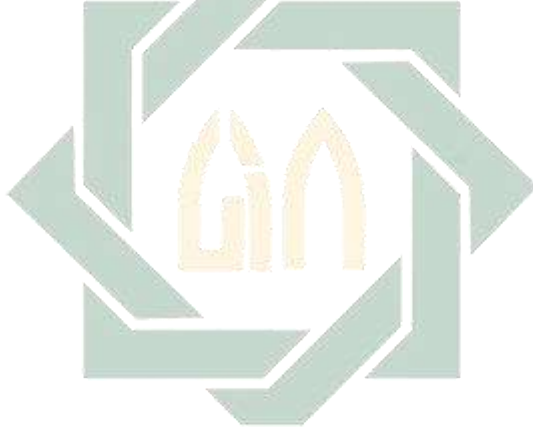
Dalam beberapa tahun terakhir, terjadi peningkatan minat dan kesadaran terhadap penggunaan generatif AI chatbot (GenAI) di kalangan siswa EFL dan mereka yang di pendidikan tinggi. Layanannya yang serbaguna dan berbasis percakapan, GenAI chatbot memungkinkan mahasiswa untuk belajar dengan cara yang mereka sukai, salah satunya adalah membaca. Meski penggunaannya untuk membaca pernah diteliti, studi sebelumnya belum membahas secara detail terkait pengaplikasiannya. Oleh karena itu, studi kasus kualitatif ini bertujuan untuk menyelidiki GenAI chatbot yang digunakan mahasiswa sarjana EFL dan implementasi strategi pemahaman bacaan mereka melalui chatbot tersebut. Data dikumpulkan melalui survei dan wawancara, yang melibatkan 34 mahasiswa sarjana Prodi Pendidikan Bahasa Inggris UINSA. Temuan penelitian ini mengungkapkan bahwa terdapat empat GenAI chatbot yang disukai oleh mahasiswa: ChatGPT karena untuk memudahkan membaca, Gemini karena fleksibilitasnya, Perplexity AI dan Meta AI karena kepraktisannya. Berkaitan dengan penerapan strategi membaca oleh siswa, hal ini telah mengakibatkan perubahan cara beberapa strategi biasanya dilakukan. Tergantung pada strategi mana, tingkat bantuan chatbot GenAI hanya sebatas mendukung atau sebagai penggerak utama strategi tersebut. Selain itu, respons siswa terhadap bantuan tersebut meliputi: memeriksa ulang dan menyimpan informasi yang diberikan, serta terlibat lebih lanjut dalam diskusi dengan GenAI chatbot. Temuan ini menyiratkan bahwa diperlukan panduan pedagogis lebih lanjut dan perlu ditetapkan regulasi seputar penggunaan GenAI chatbot untuk pembelajaran, khususnya dalam kegiatan membaca akademis.

MOTTO

يَا أَيُّهَا الَّذِينَ آمَنُوا اصْبِرُوا وَصَابِرُوا وَرَابِطُوا وَاتَّقُوا اللَّهَ لَعَلَّكُمْ تُفْلِحُونَ (٢٠٠)

“Oh you who have believed, persevere and endure and remain stationed and fear Allāh that you may be successful.”

– (Surah Ali 'Imran 3:200)



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DEDICATION SHEET

1. To the almighty Allah SWT, thank you for blessing the author with the strength and path. Only with His mercy could the author finish her thesis.
2. Dearest mother and father, thank you for the love, support, and patience that you endlessly gave to the author. Especially during her time writing this thesis. May the future hold better things.
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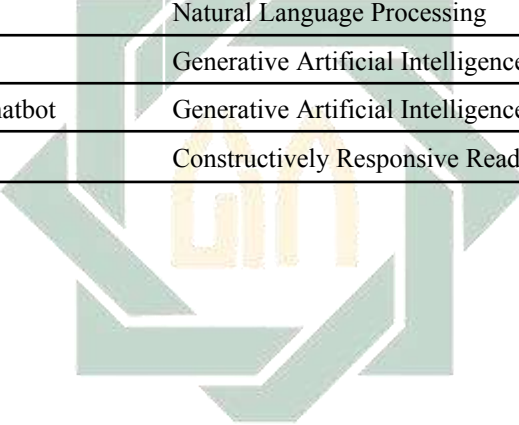
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LIST OF ABBREVIATIONS

Abbreviations	Definition
AI	Artificial Intelligence
LLMs	Large Language Models
EFL	English Foreign Language
NLP	Natural Language Processing
GenAI	Generative Artificial Intelligence
GenAI chatbot	Generative Artificial Intelligence chatbot
CRR	Constructively Responsive Reading



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CHAPTER I

INTRODUCTION

The first chapter is designated to explain the basis of the research. This is done in order to provide readers with contexts essential to understand the rationale behind the research. Thus, this section consisted of information about the research background, questions, objectives, scope, limitations, significance, and definition of key terms.

1.1 Research Background

Over the past several years, Artificial Intelligence (AI) influence within the educational community has become ever the more present. AI itself is defined as a technology consisting of computer algorithms that were designed to imitate the mind of a human, capable of recognizing, understanding, making decisions, and doing other tasks that require cognitive skills (Marr, 2024; Russell & Norvig, 2016; Soori et al., 2023). Considering such abilities, AI carries the potential to serve as a valuable learning tool and increasingly has been seen as a helpful one by the educational community. For instance, AI was found to be used by teachers and students to provide themselves with personalized assistance. Teachers would utilize the AI to help create learning contents, strategize teaching methods, and design assessments, all the more efficiently (Holmes et al., 2019; Marr, 2024; Negoită & Popescu, 2023). On the other hand, students used the tool to gain a richer learning experience, either by retrieving additional learning material or simply as a learning companion. Even though the integration of AI in educational settings is rather new, it can be expected that the tool will only continue to be used in the future, given its helpful and personalized services.

One subset of AI that was found to be utilized often by the educational community is generative AI (GenAI). According to Marr (2024), this particular AI has the additional capability to generate or produce new contents by studying the pattern and structure of the already existing ones. Hence, GenAI goes beyond merely imitating human cognitive processes (pattern recognition);

it also mimics human creativity (pattern creation). Additionally, depending on its underlying models, GenAI can generate artificial outputs in multiple formats, including: texts, images, speech, videos, or even music (Bandi et al., 2023; Zhang et al., 2023). When using GenAI, it should also be noted that the output the tool generates will follow the instructions (input) given while taking the context of its conversation with the users into account (Lin et al., 2025). Given its versatile capabilities, GenAI is deemed as a valuable technology that can support teaching and learning activities, particularly within the context of language learning. (Panagiotidis, 2024). Therefore, despite being artificial in nature, the outputs that GenAI produces are personalized, adhering to students' unique learning needs and preferences.

For English language learners, there is a subcategory of GenAI that is known to promote and facilitate them in their self-study, referred to as generative AI chatbot (GenAI chatbot). This type of GenAIs are those that operate on large language models (LLMs) systems, enabling them to process and generate dynamic responses using human-like language (Busch et al., 2025; McGrath et al., 2025). Considering that it is part of chatbot, the main purpose of a GenAI chatbot is to provide users with assistance via conversation (Freed, 2021; Gimpel et al., 2023). Meanwhile, the generative aspect of it enables the GenAI chatbot to interact with them in real-time and give contextual rather than pre-determined responses (Busch et al., 2025). Some may even create images or visualization (i.e., graphs and tables) to complement their text outputs (Gimpel et al., 2023). For English Foreign Language (EFL) students in particular, GenAI chatbots were helpful in creating an interactive and engaging study session. As a learning companion, GenAI also supports EFL students in their self-study by providing them with summarization and explanation of the learning material, giving feedback on their learning progress or writing, as well other kinds of assistance through conversation (Abdallah, 2025; W. Huang et al., 2021). Additionally, given that the response students received was based

on their unique request and need, GenAI chatbot became a tool capable of providing them with personalized learning assistance (Annamalai et al., 2023). Thus, even when they are studying alone, without the help of tutors or teachers, EFL students are found to still have a positive learning experience (Wei, 2023). In this regard, GenAI chatbot does not only assist but also gives EFL students the autonomy to study in their own preferred ways, one of which is learning by reading.

While reading an English academic reading material in particular, there are several reasons as to why EFL students may consider using a GenAI chatbot. In their study, Nurhayati, Julyan, Wiliyan (2023) found that, despite being undergraduates, Indonesian EFL students still often struggle to comprehend English sentences. They also suggested that teachers should adjust their teaching methods to better suit students' needs. Different studies also revealed that EFL students displayed a strong reliance on real-time conversational and translation support while reading texts that are in English (Hamid & Yulianto, 2022; Sol et al., 2024). Furthermore, classrooms in Indonesia often consisted of thirty or more students, making it difficult for teachers to address each of their students' learning needs (Moon et al., 2025). Based on what has been found from the studies above, there is an inclination towards a more efficient and effective reading assistance, preferably in the form of a communication-based service.

The use of AI for learning and teaching in general has been widely researched before. The following are 3 previous studies that discussed the potential benefits and challenges that AI presents when utilized by EFL students and teachers. First, in a bibliometric study conducted by Huang, Zou, Chen, and Xie (2023), the role of AI for a language learning classroom was explored. This study involved reviewing a total of 516 published papers ranging from the year 2000 to 2009. Their findings revealed that there is an increasing trend of research on AI and its prospects for an AI-enhanced language education. The reason for this was due to a notable improvement in EFL students' overall English skills after

integrating AI in the classroom. The second study was conducted by Dai and Liu (2024), which explored the perspective of 45 EFL Chinese students surrounding the use of AI in their learning. Gathered through open-ended questionnaires and interviews, the students' responses revealed the perceived benefits and challenges that may arise from integrating AI in EFL classrooms. Although AI as a tool did enrich the students' learning experience by providing feedback and additional learning resources in their preferred presentation (table, bullet points, analogies, etc), concerns were also apparent regarding the students' possible over-reliance on the tool. The third study was done by Al-Othman (2024), which also explored the challenges and possible downsides of AI use by EFL undergraduate students. This qualitative study involved gathering the perspectives of 24 Arabian teachers regarding the impact AI has on their students' language performance. The interview revealed that there exists a need for guidance in utilizing AI as well as an expectation for it to be integrated within the EFL classroom. Similar to the previous study, concerns were also raised surrounding students' tendency to over-reliance on AI's assistance. Moreover, the lack of human presence blurred the fine line between a constructive and unproductive use of the tool. There is also a risk of AI reducing students' ability to think critically and creatively in the long run. From those 3 studies, it can be said that there is a growing interest as well as awareness regarding the benefits and concerns regarding AI's use by EFL students, thereby highlighting the relevance of this research topic.

In regards to GenAI chatbots specifically, there were 3 studies found that discussed EFL students' use of the tool to support their learning activities. The first study was carried out by Zhou (2024), which examined how ChatGPT, as one of the more well-known GenAI chatbots, affects EFL undergraduate students' motivation to study. This qualitative study involved gathering students' opinions and attitudes while interacting with the GenAI chatbot, paying heed to their extrinsic, intrinsic, achievement, and social motivation. Through the interview, it was revealed that

ChatGPT left a positive impression on the EFL undergraduate students, as noted by their increasing motivation to learn. The reason for this was due to the GenAI chatbot's ability to provide real-time conversational support and feedback during the learning session, empowering students to navigate through and overcome their shortcomings. The second was a recent study conducted by Satiti, Fauziati, and Setyaningsih (2024) which examined the efficacy of GenAI chatbots in supporting Indonesian undergraduate students' English language learning. This descriptive study involved gathering the student's perspective surrounding the usability, language accuracy, and feedback quality generated by the AI chatbots. Using a questionnaire and based on the responses of 95 Indonesian undergraduate students, it was revealed that the majority of them were satisfied with the GenAI chatbot's assistance, especially for its ability to provide and adapt to each student's unique learning needs in real-time, granting them personalized assistance. Students also reported positive learning experiences and perceived improvements in their English language skills. The third study was conducted by Slamet (2024), exploring the use of ChatGPT by Indonesian EFL students. This cross-sectional survey study focused on students' preferences, perceptions, satisfactions, and attitudes towards the GenAI chatbot, involving as many as 80 EFL teachers and 46 EFL students. In its findings, the study revealed that there is an apparent concern from both teachers and students alike, specifically on the language accuracy of the outputs generated and students' possible over-reliance on the tool's assistance. However, many also believed that the GenAI chatbot's ability to provide a rich and personalized learning experience helps to improve students' English language competency. Moreover, the study also highlights the need and importance of regulations, guidance, and pedagogical support on AI use in general within the EFL classrooms. Considering the findings mentioned above, it can be said that although GenAI chatbots are valuable in providing real-time and personalized

assistance, the need for regulation and the lack of pedagogical guidance remain to be addressed.

There were also 4 studies found that have discussed the use of GenAI chatbots by EFL students in relation to their reading activities. The first study is a quasi-experimental study conducted by Zheng (2024), investigating the effectiveness of GenAI chatbots in alleviating Chinese EFL students' reading anxiety as well as improving their performance. The data was gathered using tests and semi-structured interviews. From the pre- and post-test results, it was discovered that the use of GenAI chatbots significantly reduces students' reading anxiety. As for the interview, it was revealed that students responded positively to the verbal support and linguistic assistance provided by the GenAI chatbot during their reading activities. Conducted by Kim (2024), the second study was also a quasi-experimental study. This study investigated the effects that ChatGPT has on EFL Korean students' reading comprehension. The pre-, immediate post-, and delayed post-test results showed that the experimental group showed significant improvement in top-down reading comprehension skills, suggesting that the GenAI chatbot effectively supported learners' ability to identify main ideas. Additionally, through interviews and chatbot interaction logs, it was revealed that students held positive perceptions towards the GenAI chatbot's assistance. Additionally, this study also highlights the importance of maintaining a balance between reliance on AI tools with appropriate pedagogical guidance and ethical considerations. It was also suggested that future research should explore more of EFL students' practical application or use of GenAI chatbots in their language learning. The third study was carried out by El Hassan and Alsalwah (2025), aimed to investigate the effect of integrating ChatGPT into EFL students' reading classes. Teachers' and students' experiences in using the AI were examined, specifically in regard to their level of engagement, found challenges, and the overall effectiveness of the tool itself in EFL reading classes. This mixed-methods exploratory study revealed that there is a significant positive effect on

undergraduate students' reading comprehension, vocabulary acquisition, and engagement with texts. Similar to previous studies, concerns were raised about the risk of over-dependence on AI. The study also recommends promoting the use of GenAI chatbots to create dynamic, engaging, and interactive comprehension checks. The fourth study was conducted by Liu, Liao, Chang, and Lin (2022). They investigated the GenAI chatbot's potential to be used as a reading companion that enhances EFL students' reading experience. The participants of this study were 68 EFL elementary school students, where they are asked to interact with the GenAI chatbot in a six-week-long reading activity. The study revealed that students formed a positive relationship with the GenAI chatbot. The tool helped create a supportive and interesting reading experience. From the four studies above, it can be said that GenAI chatbots can and have been used to assist students in their reading activities. However, it was also noticed that the studies did not go into detail on how EFL students actually use the GenAI chatbots in their reading. This existing gap serves as the basis for shaping the objectives and significance of the current research.

Drawing from all of the studies above, the relevance and significance of this research trace back to the increasingly growing interest and awareness towards AI amongst EFL students and higher education, the need for regulation of AI use that remains to be addressed, and the lack of studies that delve into detail surrounding the current practical application of GenAI chatbots by EFL students in their reading activities. Therefore, in filling that gap, this qualitative case study aims to investigate the GenAI chatbots that EFL undergraduate students use and explore their implementation of reading comprehension strategies through said GenAI chatbots. The data was collected through an open-ended survey and semi-structured interview session, garnering an in-depth description of EFL undergraduate students' use of GenAI chatbots to facilitate their reading comprehension. The findings of this research hopefully can contribute as one of the bases for

developing regulations or guidelines surrounding the use of GenAI chatbots for learning.

1.2 Research Questions

Building upon the background that was stated in the section before, the research questions of this study were as follows.

- 1.2.1 What generative AI chatbots do EFL undergraduate students use to facilitate their English reading comprehension?
- 1.2.2 How do EFL undergraduate students implement reading comprehension strategies through generative AI chatbot-mediated reading?

1.3 Objectives of the Study

Based on the research questions mentioned above, the objectives of this research were as follows.

- 1.3.1 To investigate the generative AI chatbots that EFL undergraduate students use to facilitate their English reading comprehension.
- 1.3.2 To explore the implementation of reading comprehension strategies by EFL undergraduate students through generative AI chatbot-mediated reading.

1.4 Significance of the Study

Considering the relevance of the research's topic to the current educational context, the findings of this research are expected to provide valuable insights for students, educators, and researchers alike.

1.4.1 For Students

Whether through participation or simply as readers, this research is expected to bring awareness and encourage EFL undergraduate students to be more constructive and reflective with their GenAI use, prioritizing meaningful and

responsible engagement with the tool, especially when doing an academic reading or learning in general.

1.4.2 For Teachers

The findings of this research is expected to shed light on the current practical application of GenAI chatbots by EFL undergraduate students during their academic reading, serving as a basis for what teachers could do in the future, helping to guide and support students in their attempt to use the chatbots in a constructive and ethical manner.

1.4.3 For Future Researchers

This case study is expected to serve as one of the grounds for a deeper exploration and in developing regulations surrounding the utilization of GenAI chatbots by EFL undergraduate students in their reading or learning activities in general. Hence, the findings of this research hopefully can enhance our understanding of AI's role in education as well as improve the current practices into something far better.

1.5 Scope and Limitation of the Study

The scope of this qualitative single case study includes the GenAI chatbots that EFL undergraduate students use and their implementation of reading comprehension strategies through the said GenAI chatbots to facilitate their English reading comprehension. To answer the first research question, information about the name of the GenAI chatbot that students prefer to use the most while reading and their reason for using it were collected. As for the second research question, information about students' purpose for using the GenAI chatbot (in relation to implementing which reading comprehension strategies), their extent of using it, and their response towards the given assistance were also gathered.

This research is limited to the use of GenAI chatbots while reading academic materials that were written in the English language. Additionally, given that this is a case study, the research

participants and settings were limited to undergraduate students from the English Language Education Department (ELED) at the Islamic State University of Sunan Ampel Surabaya (UINSA), where they were given permission to use AI technologies by some lecturers to help with their studies. The research involved a total of 34 students, ranging from the 2nd, 4th, 6th, and 8th semesters in the 2025-2026 academic year. The participants of this research were those who have been routinely using a GenAI chatbot to help with their academic reading at least once a week and do so for at least 3 months or more. Therefore, the data of this research was gathered from individuals that were familiar with using GenAI chatbot while not necessarily being experts themselves.

1.6 Definition of Key Terms

In consideration of clarity, the key terms of this research are elaborated in the following section, which includes: generative artificial intelligence chatbot, reading comprehension, and reading comprehension strategies.

1.6.1 Generative Artificial Intelligence Chatbots

Generative Artificial Intelligence chatbots, also referred to as GenAI chatbots, are Large Language Models (LLMs)-powered chatbots capable of processing and generating novel, dynamic, real-time outputs mainly in the form of text and increasingly in other modalities (e.g., images, visualizations, audio, or even videos) based on already existing data and in accordance to users' instructions (input), offering them conversation-based services using human-like language (Busch et al., 2025; Gimpel et al., 2023; McGrath et al., 2025). For this research, GenAI chatbots are LLMs-powered chatbots capable of processing and generating novel, dynamic, real-time outputs mainly in the form of text and increasingly in other modalities based on already existing data and in accordance with EFL undergraduate students' instructions,

facilitating their English reading comprehension through conversation-based services using human-like language.

1.6.2 Reading Comprehension

Reading comprehension refers to the process of drawing out and making meaning through active interaction and engagement with the written language or text (Snow, 2002). For this research, reading comprehension is defined as the process of drawing out and making meaning through active interaction and engagement with English academic materials conducted by EFL undergraduate students through GenAI chatbot-mediated reading.

1.6.3 Reading Comprehension Strategies

Following the model of Constructively Responsive Reading (CRR), reading comprehension strategies are defined as an active decision-making process that is done strategically and continuously in response to the text being read with the intention of fulfilling the established reading goal (Pressley & Afflerbach, 1995). In their verbal protocol studies, Pressley and Afflerbach (1995) also identified and documented the strategic actions commonly employed by readers based on the CRR process. For this research, these actions are taken as reference and synthesized into the following six reading comprehension strategies: (1) overviewing-skimming, (2) activating prior knowledge, (3) inferring, (4) determining meaning, (5) making notes, and (6) evaluating-reflecting. All of which is done in response to the academic reading materials with the intention of achieving comprehension and fulfilling their academic-related reading goals.

CHAPTER II

REVIEW OF RELATED LITERATURE

In the second chapter, theories and previous studies related to the focus of this research are reviewed. The following section involved analyzing what has and has not been discussed surrounding the research topic.

2.1 Review of Related Theories

2.1.1 Technology in Language Learning

According to Grüber (1998), technology is all of the things that were designed and created to be used by humans, either to enhance what's already possible or enable what's previously impossible. However, it is equally important for users to understand both how to use the tool effectively and how it was made. The potential benefits of a technology are only as useful as the knowledge of the person using it. In recent years, technology has become increasingly inseparable from the peoples' everyday life, growing more intertwined and simultaneously more advanced. This includes its role within the educational field.

Stanley (2013) argued that in the context of language learning, technology should be utilized to serve the pedagogical goal. The tool should function as a support that paves the path to a more creative, efficient, and effective learning, fostering engagement and rich learning experiences. Furthermore, technologies enable learners to be exposed to rich language contexts. When used outside the classroom, they also promote learners' autonomy in their own learning process.

This is related to Zeng (2018) remark regarding language learners' agency. In using the technology, learners are actively shaping their own language learning experience by performing strategic actions driven by purposeful motivation to reach their goal. Therefore, technology

enables language learners to have personalized support in accordance with their learning needs. Nevertheless, it should be noted that technology is bivalent in nature. Therefore, language learners, especially younger ones, should also be guided and encouraged to have a constructive, ethical, and healthy engagement with the tool.

2.1.2 Artificial Intelligence in Education

As a technological concept, AI refers to computer systems that are designed to simulate human intelligence, capable of performing cognitive-related tasks, such as recognizing, understanding, perceiving, reasoning, planning, and making decisions. AI operates through data-driven and algorithmic processes in a percept-action cycle, aiming to achieve its goals of assisting users by perceiving its context and providing the appropriate actions or responses (Marr, 2024; Russell & Norvig, 2016; Soori et al., 2023). According to Russell and Norvig (2016), essentially, AI as a tool has its societal function, and humans bear the responsibility to utilize it constructively for advancing and creating an overall better life.

Within the educational context, Holmes, Bialik, and Fadel (2019) noted that AI has the potential to revolutionize education. Considering its abilities, it not only offers access but also enhances equity and learning outcomes. From the learners' standpoint, AI also presents them with a chance to experience an individual and adjustable learning process. The tool helps create a more inclusive and responsive learning environment in accordance with learners' needs and preferences. This was achieved through the technology evaluating their behaviors, modifying the learning content, and also giving real-time feedback. Additionally, it is able to monitor the progress of learning among the learners and reveal their misconceptions during instructions.

However, the existence of education also has its own drawbacks. There are risks of the possibility of students over-relying on the tool, using it unproductively, and threats of data breaches. Holmes, Bialik, and Fadel (2019) also shared their concerns regarding this and warned the educational community to be aware of both AI's potential and dangers. Teachers need to be equipped with relevant knowledge, learners' ethical awareness should be fostered, and clear guidelines and policies should be established so that the use of AI is rightfully aligned with educational goals. AI should also be viewed as a valuable support rather than a replacement for essential educational roles, with education always remaining human-centered.

2.1.3 Chatbots

Chatbots (chatterbot) or Conversational AI are computer systems that operate on a fully conversational interface, enabling natural language conversations with users in the form of text or voice inputs in order to accomplish their assigned tasks. They are often viewed and used as an assistant, either for personal matters (self-help) or as agents providing services. During use, users tend to have multiple dialogue exchanges, often to ask or provide additional context for the system to process (Freed, 2021; Gimpel et al., 2023). Accordingly, chatbots are designed to be able to fulfill multiple requests during a single conversational session

Since their first inception in the 1960s, chatbots have become more advanced. The early iteration of chatbots was a rule-based chatbot with Natural Language Processing (NLP) systems that relied heavily on sets of predefined patterns and responses. Due to their limited flexibility, these chatbots were unable to assist with complex and unexpected queries outside of their programmed scope (Busch et al.,

2025). Therefore, rule-based chatbots were often used only for handling simple tasks such as answering FAQ's

More recent chatbots, however, are designed with machine-learning models, specifically Large Language Models (LLMs). These chatbots are given access to large amounts of text data. Chatbots powered with this model are referred to as GenAI chatbots. Unlike rule-based systems, GenAI chatbots are capable of processing and generating dynamic, context-aware, and novel outputs in real-time based on information from their training data rather than fixed templates. This enables them to deliver personalized and extended interaction that can flexibly adapt to users' input (Busch et al., 2025). Moreover, many modern chatbots now incorporate more than one model, enabling them to generate not only text but also to stylize it with emojis or present it in other modalities such as images, audio, video, charts, and tables (Bandi et al., 2023; McTear et al., 2021; Zhang et al., 2023). Thus by nature of its design, the services GenAI provides are more versatile and life-like compared to its rule-based counterpart.

2.1.4 Generative Artificial Intelligence Chatbots

Generative Artificial Intelligence chatbots are one of the applications within the generative AI (GenAI) subfield. GenAI itself is referred to as a tool capable of generating novel content by learning the patterns and structures of existing data from which it took reference. Those under GenAI all operate using machine-learning models; consequently, they are designed with the ability to not just simulate human cognitive processes (pattern recognition) but also creativity (pattern creation) by generating something that is new and unique. However, depending on its underlying models, GenAI may produce a range of synthetic outputs, including images, videos, speech, music, and text generation (Bandi et al., 2023; Zhang et al., 2023).

For example, GenAI powered by LLMs is trained on vast amounts of human language data, enabling it to produce text outputs that resemble human-like responses

All GenAI chatbots function using LLMs, allowing them to process and generate dynamic and novel outputs in the form of texts based on already existing data and according to user input, offering users conversational services using human-like language and responses (Busch et al., 2025; Gimpel et al., 2023; McGrath et al., 2025; McTear et al., 2021). GenAI chatbots, which are based on Natural Language Processing (NLP), work by breaking down user input and analyzing its semantic meaning to determine the context and task assigned. Subsequently, they are run through neural networks of many layers to predict the most suitable response or continuation. In practice, the outputs produced will take the shape of words, phrases, or any other modalities that are derived from the given input (Lin et al., 2025; McGrath et al., 2025). Additionally, these generative features are embedded into interactive systems, enabling them to provide the outputs in real-time, be contextually aware of the tone, relevant to the assigned topic, and flexible to a new input each time.

Regarding the use of GenAI chatbots within the educational community, (Gimpel et al., 2023) emphasized the need to be cautious and responsible in adopting the technology. Despite being able to generate fluent and contextually relevant responses, it should be noted that the generated outputs are merely based on statistical correlation rather than actual comprehension, like that of a human. Thereby, while using, both educators and learners should follow a guide, be supervised, and conduct reflection to maintain ethical use of the tool and academic integrity. Related to this, (Marr, 2024) proposed that users should adopt the “GenAI mindset” in the sense that GenAI chatbots

are to be used only for enhancing human competencies rather than replacing them.

2.1.5 Reading Comprehension Elements

According to Snow (2002), reading comprehension is defined as the process of drawing out and making meaning from written language through active interaction and engagement with the text. The act of reading consists of three elements: the reader, the text, and the activity or purpose of reading itself. These elements, together within a larger sociocultural context, will influence and be shaped by readers to form a mental comprehension as they interact with each of the elements iteratively throughout the process of reading.

a. Reader

In meaning-making, the reader is positioned as the individual possessing cognitive, linguistic, and motivational resources necessary to understand the written language they are reading. Readers are to carry out a complex process involving recognizing, making connections, and inferring the meaning from a text. Meanwhile, the result of the comprehension itself is also shaped by the motivation, prior knowledge, and goals the readers have. Some may also decide to read strategically, this is true for skilled readers, where they would consciously monitor their own understanding to effectively comprehend what they read.

b. Text

The text in reading comprehension is the linguistic and structural elements readers will engage with, consisting of vocabulary, syntax, coherence, and organizational features. The text itself differs in genre, form, and level of complexity. It should be noted that this difference depends on the text's purpose and the readers'

own comprehension skills. Moreover, the kind of comprehension that is required can also vary; sometimes surface-level understanding is enough, but other times text-based or situational aspects of the text are needed as well.

c. Activity

The activity elements refer to the process of reading, including the readers' purpose and actions taken for reading. Readers may engage with a written language for several reasons, such as to gain new knowledge, seek specific information, or simply for entertainment. Depending on their goal, the actions they take and outcomes gained can also differ, whether it's the content itself or the emotions experienced during reading. Additionally, readers will develop better literacy skills the more they read, refining their practice by repeated experience.

Snow (2002) also highlighted that the interaction between the three reading elements occurs within a broader sociocultural context. It should be considered how the act of reading is viewed, taught, experienced, and interpreted across different environments. Communities may also differ in accessibility, expectation, and value towards books or other written languages. Therefore, reading is a complex process of meaning-making, shaped by both internal and external factors in which the reading occurs.

2.1.6 Reading Comprehension Strategies

Following the model of "Constructively Responsive Reading" (CRR), reading comprehension strategies are defined as an active decision-making process that is done strategically and continuously in response to the text being read with the intention of fulfilling the established reading goal (Pressley & Afflerbach, 1995). In their verbal protocol studies, Pressley and Afflerbach (1995) also identified and

documented the strategic actions commonly employed by readers based on the CRR process. These actions were then synthesized into the following six reading comprehension strategies: overviewing-skimming, activating prior knowledge, inferring, determining meaning, making notes, and evaluating-reflecting.

a. Overviewing-Skimming

Readers may read through the whole text briefly or skim over sections to first gain the general idea of what kind information is being presented. This initial processing of a text stems from readers' awareness of their own reading goal. Depending on the goal, some information can be deemed as important while other sections are not. In doing so, readers may go over the text quickly, before slowing down and start carefully reading once they encounter a section deemed as crucial to understand. Therefore, while reading is often done from front-to-back, depending on the needs, readers may instead jump ahead to gather important points before returning back to the beginning.

b. Activating Prior Knowledge

When readers are familiar with what they are reading, they may use their prior knowledge to interpret the text. This is done by relating what they already know to the material in order to form a prediction or hypothesis. The familiarity itself can be about the discussed topic, the structure of the text, or even extend to the author's intention. It is also common for readers to later reconsider or revise their understanding about the material as new information is gradually being learned.

c. Inferring

Sometimes, readers may need to infer implicit yet also crucial information in order to fully understand the text. Although this is often done automatically or

unconsciously, inferring can be noticed later on when readers are re-reading the text or trying to skim over to find a specific kind of information. The inferences made itself can range from words, sentences, even to overall conclusions. Therefore, the meaning attributed to the text may change as readers continue to read, constantly adjusting their understanding based on the new set of information.

d. Determining Meaning

Readers may try to seek the meaning of words that they are not familiar with or have yet to understand, especially when its meanings are crucial to understand what is being discussed. In doing so, readers will linger on the word or phrase, determining its meaning either through context clues or relating it to the overall idea. However, it should be noted that if the reader deems the word or phrase as not important, or that they struggle to determine the most suitable meaning, they may instead choose to just skip it entirely.

e. Making Notes

When readers try to memorize the information that they read, they may make notes in one of the following ways: underlining, highlighting, circling, listing, visualizing, summarizing, outlining, paraphrasing, and self-questioning. What is being noted for can also differ, depending on the established reading goal. Some readers may choose to take notes of only the important points or examples, while others use it as a future reference that should be looked at or considered later.

f. Evaluating-Reflecting

After reading the text, readers may choose to assess the quality, credibility, or emotional impact of the text. This can take form in the act of commenting, questioning, challenging, or even rejecting the idea of what they had

just read. Another post-reading activity is reflecting, where readers would connect the ideas with their experiences or broader beliefs. In this sense, readers may have personal resonance with what they have just read.

2.1.7 GenAI Chatbots to Facilitate Reading Comprehension

Within the context of language learning, Panagiotidis (2024) underscored the starting trend of utilizing GenAI chatbots by language learners. Considering GenAI chatbots' adaptive nature, students can make use of this to provide themselves with personalized language learning experience while also fostering their learning autonomy. They are free to ask and practice their language skills, doing so at their own pace and preferred way. Therefore, the potential of GenAI chatbot in facilitating language learners lies in its capability of providing a wide range of language-related assistance, which is provided through the tool's dynamic and real-time conversational interface.

The practice of using GenAI chatbots for informal or independent learning of English has also begun to emerge. According to Anjarani & Suwartono (2024), the technology assists students by fostering their autonomy and enabling them to have personalized learning experiences. GenAI chatbot amplifies this potential by allowing them to set their own learning goals, manage their pace, practice their preferred way of learning, and explore topics that suit their interest, which prompts them to have deeper engagement with the learning material. It essentially made learning itself more accessible and enriching. However, as emphasized by other figures before, the utilization of the GenAI chatbot is to be done with caution and a strategy in order to minimize the risks of data breach and tendency of over-relying on the tool. Moreover, it becomes the teacher's responsibility to educate their students and model the constructive use of GenAI chatbots.

Since the year of 2022, there have been a number of GenAI chatbot platforms that were known to be used by students within their English language learning (McGrath et al., 2025). The mentioned GenAI chatbot platforms include: ChatGPT, Gemini, Perplexity AI, Meta AI, DeepSeek, and Bing Chat. EFL students' use of ChatGPT revealed how students used the GenAI chatbots to alleviate their learning difficulties, asking the tool for translation, feedback on grammar, and paraphrasing (Ho, 2024). Similarly, Gemini was found useful by EFL students in facilitating their learning through monitoring progress, giving feedback, as well as improving their learning engagement, autonomy and confidence (Baskara, 2025; Nguyen, 2025). Perplexity AI was found to be considered as a tool that can enhance EFL students' productivity and motivation in learning by providing overview or summaries of academic reading materials. (Utami et al., 2024). The same was for DeepSeek, where it was found to be useful in fostering learning engagement as well as motivation, allowing students to experience a more joyful and personalized learning via its explanations (Ramadhani & Hamid, 2025). Additionally, in the use of Bing Chat, EFL students reported having a positive learning experience with the GenAI chatbot (Kovačić & Bubaš, 2023). The sixth and last found GenAI chatbot is Meta AI, where it supported students' reading comprehension through its capabilities to translate and respond dynamically to EFL students' requests and in accordance to their need (Susilowati et al., 2025). Based on the studies above, GenAI chatbots facilitate EFL students' language learning through their dynamic and real-time conversational services as well as capabilities in providing: translations, feedbacks, paraphrasings, summaries, as well as explanations, all of which are personalized according to the EFL students' unique needs and preferences.

When framed within the context of reading, GenAI chatbots can potentially facilitate EFL students' reading comprehension through the capabilities and benefits mentioned before. The utilization of GenAI chatbot in EFL students' academic reading allows them to give themselves a personalized, dynamic, and interactive reading assistance. Given its versatility, the GenAI chatbot can quickly adjust itself to the context EFL students placed them in, including the established reading goal, the nature of the conversation, and any other specific request that they made to the chatbot. Moreover, GenAI chatbot promotes and supports their autonomy in doing academic reading, serving to be an accessible reading assistance while also turning the reading material itself into something that is more accessible to comprehend. In this sense, the GenAI chatbot can be used to translate, paraphrase, provide comprehension feedback, summarize, and explain the academic reading materials however students asked it to be. However, considering the challenges and risks that come along with using GenAI chatbots, EFL students should utilize the tool with caution, responsibly, and strategically in their reading. In addition, teachers should provide guidance in their AI use in order to minimize the risk of students over-relying, unconstructively using, or even ineffectively using the GenAI chatbots within their academic reading.

2.2 Review of Previous Studies

In relation to EFL undergraduate students' use of GenAI chatbots to facilitate students' reading comprehension, the following are reviews of several related previous studies. From the total of 20 studies, 8 studies were found discussing the potential and impact of GenAI chatbots on EFL students' reading comprehension, 6 studies discussing the perceptions and influences that may prompt students to utilize GenAI chatbots in their reading activity, and with the last 6 studies discussing the practical

application of GenAI chatbots to facilitate EFL students' reading comprehension.

Starting with the previous studies that discussed the potential and impact of GenAI chatbots on EFL students' reading comprehension. The first study was conducted by (Hedlin, Estling, Wong, Epp, and Viberg (2025). It was aimed to investigate the potential of ChatGPT in simplifying academic reading materials and the effect of several prompting strategies on the readability of the text. This study involved 136 academic reading materials that were rewritten using four different prompting approaches, including standard, chain-of-thought, meta, and role-play. The result revealed that all four of the prompting strategies had improved the readability of the academic materials; however, it was especially effective with the meta prompting strategy. The study also concluded that GenAI chatbots such as ChatGPT are capable of making academic reading material easier and more accessible to students by increasing its readability, making it a valuable tool that alleviates their reading difficulties, while promoting equitable learning opportunities. This study is deemed relevant to the current research as it shows the potential of GenAI chatbots to be used by EFL students to make academic reading material easier and more accessible to read.

The second study was done by Muman (2025), aimed to examine the potential of ChatGPT, one of the more popular GenAI chatbots, in developing EFL students' reading comprehension skills. This mixed-method action research involved 30 high-school students from a vocational high school in Indonesia. The data of this study were the reading difficulties that students faced and the effectiveness of the implementation of several reading strategies: predicting, questioning, clarifying, and summarizing strategies. Gathered through observation, tests, and a survey, the results of this study show that the EFL students were able to gain an interactive and engaging reading experience, significantly improving their reading comprehension, motivation, and confidence. Within the study, the researcher claimed ChatGPT as a valuable learning tool

while also highlighting the need for EFL students to be aware of its shortcomings and learn on how to properly use it. This study underscored the effect or benefit of using a GenAI chatbot that EFL students' may consider to support their English reading comprehension, making it relevant to the present research's topic.

Carried out by Tan, Hien, and Phuong (2025), the third study aimed to explore the effectiveness and accessibility of several GenAI chatbots, including ChatGPT, Gemini, and Grok, in enhancing EFL undergraduate students' four English skills: reading, writing, speaking, and listening. This mixed-method study involved 300 English major students from Binh Duong University, with the data gathered in the form of their assignments and interview responses surrounding their experience in using the GenAI chatbots. The result of the analysis shows that ChatGPT, Gemini, and Grok were perceived as very user-friendly, accessible, and effective in improving the EFL undergraduate students' four English skills. This was most apparent in their reading skills, in which many of the students reported feeling more confident with their comprehension due to the GenAI chatbots' real-time and adaptive feedback. Given the findings, especially in relation to EFL undergraduate students' reading comprehension, this study was deemed relevant to the current research as it underscored how GenAI chatbots enhance their reading comprehension with their real-time reading assistance.

The fourth study was carried out by Yen (2024). The researchers tried to investigate the effectiveness of ChatGPT in adapting a text, specifically in regard to the lecturers' beliefs, and found challenges while using it within the EFL classroom. This mixed-method study involved two reading passages from a practice textbook that were then given to ChatGPT, as well as 10 English lecturers working for a university, to be interviewed. The result of this study revealed that the AI-generated simplified versions of the text were proven to be easier for EFL undergraduate students to comprehend. The GenAI chatbot was found capable of adjusting the language complexity of the text, all the while retaining its

overall meaning. Although minor inconsistencies may still happen, the researcher concludes the study by promoting collaboration between the GenAI chatbot and lecturers in order to efficiently and effectively create a more inclusive and personalized learning environment. This study is deemed relevant to the present research as it shows the potential of GenAI chatbots facilitating EFL students' reading comprehension by adjusting the language complexity of the academic reading materials appropriate to each of their proficiency levels.

Carried out by Rajamani and Rajaseela (2025), the purpose of the fifth study was to examine two GenAI chatbots' influence on learning outcomes and academic research by analyzing their design, features, and ethical implications. This comparative study's scope includes the accuracy, usability, sources, and interactivity of Perplexity AI and ChatGPT, investigating their strength and drawbacks within the education and research context. The data of this study were in the form of real-world practice of the GenAI chatbots being used to mediate learning and research. The analysis result revealed that both Perplexity AI and ChatGPT manage to enhance both productivity and efficiency. ChatGPT in particular excels in providing reasonable reasoning, demonstrating creativity, and synthesizing content from reading materials. Meanwhile, Perplexity AI was more adept at providing accurate, recent, and citation-supported information, making it especially useful for fact-checking information and research purposes. This study is deemed relevant to the current research as it illustrates the capabilities of ChatGPT and Perplexity AI that can support EFL undergraduate students' reading comprehension.

Carried out by Pondelíková and Luprichová (2024), the purpose of the sixth study was to investigate the potential of GenAI chatbots such as ChatGPT, Perplexity AI, and Gemini in supporting EFL higher education students' reading comprehension along with their critical thinking skills. The methodology of this workshop research was based on the design thinking principles by Plattner, Meiner, and Leiffel (2011). From this, the study revealed

that the GenAI chatbots have significant potential in improving students' reading comprehension and critical thinking skills, providing them with personalized explanations, as well as promoting deep reading and analysis from diverse perspectives. Moreover, the reading material or text that was adapted by the GenAI chatbot was found to be more cohesive and structured narrative-wise. Despite the tone remaining formal and academic, the varied sentence length overall improved its readability and flow. Furthermore, the researchers ended their study by underlining the importance of educators providing pedagogical guidance so that the EFL students may utilize the GenAI chatbots more effectively and wisely in their reading or learning practices in general. This study is deemed relevant to the present research as its findings highlighted the potential of GenAI chatbots in facilitating EFL undergraduate students' English reading comprehension.

The seventh study was carried out by Ironsi and Bostanci (2026). The purpose of this explanatory mixed-method study was to examine the impact of ChatGPT as an assistant on EFL higher education students' reading comprehension strategies, which include literal understanding, inferencing, and information integration. The experiment involved a total of 86 students, which were divided into two groups: one that received traditional instruction (control group), while the other used ChatGPT to act as a supplementary scaffold (experimental group). The intervention that the experimental group received was vocabulary clarification, inference support, and feedback regarding their comprehension. The data gathered for this study consisted of EFL students' experience of using ChatGPT, specifically about its effect on their autonomy and confidence, as well as how they maintain the balance between helpfulness and dependency. The study revealed that the experimental group has showcased a better reading comprehension result and perceived autonomy, while also noting how there is an apparent shift toward strategic AI use for learning. Considering the findings, this study is seen as relevant to include,

given its framing of GenAI chatbots as potentially useful in facilitating EFL undergraduate students' reading comprehension.

The eighth study was carried out by (Sagita M., Sagita E., and Syafari (2025). The goal of this quantitative cross-sectional study was to examine the effect of GenAI chatbot-mediated self-regulated reading strategies on 62 EL higher education students' engagement level. The participants were students at a university in Indonesia, studying in a 14-week SRL course. The data of this study were gathered using pre- and post-tests and surveys, followed by semi-structured interviews with 18 of the students. The result of this study revealed an improvement in students' reading comprehension results, which were attributed to the GenAI chatbot's conversational-based and scaffolding services. The researchers concluded their study by underlining the prospect of technology in facilitating EFL undergraduate students' self-study or reading activities, given its capability to provide real-time and dynamic feedback and strategic coaching, alleviating any challenges experienced during traditional reading. Therefore, this study was deemed relevant to the current research as it underscored how a GenAI chatbot enables EFL students to comprehend the academic reading materials via its interactive feature.

The next six studies will discuss the perceptions and influences that may prompt students to utilize GenAI chatbots in their reading activity. For the ninth study, it was conducted by Tahir and Jährir (2025). The researchers tried to explore the perception of EFL postgraduate students regarding ChatGPT to replace the practice of traditional reading. The focus of this quantitative study consisted of the influence that it has on the students' cognitive engagement and reading behaviour. This study involved as many as 108 master students from the English Education department from the State University of Makassar. Using a questionnaire, the data gathered include ChatGPT's perceived usefulness, ease of use, impact on reading habits, and cognitive offloading. The result of this study revealed that GenAI chatbots like ChatGPT have made

EFL students' learning more efficient and accessible by providing immediate explanations and summaries of their academic reading materials. However, it also shows the decline in students' practice of deep reading, noting the risk of GenAI chatbots being used to replace rather than support their English reading comprehension. Given the implication, this study was deemed relevant to the current research as it underscored how a GenAI chatbot enables EFL students to comprehend the academic reading materials more quickly and easily.

Carried out by Dzimar, Maulida, Jannah, and Rahma (2026) the purpose of the tenth study was to investigate EFL students' perception of ChatGPT in relation to their frequency of use. This quantitative correlational study involved 38 EFL undergraduate students studying in the English education department from Pekalongan. The data consisted of the students' perception of the GenAI chatbot's usefulness, ease of use, dependence, and its role in fostering creativity while learning, gathered using a questionnaire and analyzed based on Spearman's Rank correlation. The result of this study shows a significant correlation between EFL students' frequency of use and their perception on ChatGPT, noting that the more often they interact with the tool, the more valuable the tool will be as an always available learning companion. However, it was also highlighted that frequent use of ChatGPT will also result in them growing more dependent on the GenAI chatbot assistance. Considering the findings, this study is seen as relevant given its framing of GenAI chatbots as a valuable and flexible learning companion, as well as its emphasis towards EFL students' possibility of over-relying on the tool's help.

Conducted by Ravšelj, Keržič, Tomaževič, Umek, Brezovar, and others (2025), the goal of the eleventh study was to provide a comprehensive global study on the perception of higher education students regarding the different aspects of ChatGPT and its use within their study and career development challenges. This study involved a total of 23,218 students across 109 countries and used a survey to gather all of the necessary data. The analysis result

reveals that the students mainly used the GenAI chatbot to help with brainstorming, summarization, retrieving research articles, and for both professional and creative writing. In relation to the act of reading specifically, the students reported its usefulness in summarizing and simplifying complex content from reading materials, even deeming their response or output clearer than that of their peers and teachers. Furthermore, students have underscored the need for regulations in the utilization of AI within education, noting that it poses concerns, increasing the risk of cheating, plagiarism, and social isolation. Given the findings, this study was deemed relevant to the present research as it highlights how ChatGPT, as a GenAI chatbot, can facilitate students' reading comprehension.

For the twelfth study, it was conducted by Patty and Lekatompessy (2025). The purpose of this quantitative study was to examine EFL undergraduate students' perception toward the usefulness of Gemini, along with the challenges that they found while utilizing it to support their reading, listening, speaking, and writing skills. Using a survey, the study involved as many as 116 students who were studying in the English Education Department at Pattimura University in Eastern Indonesia. The research of this study revealed that among the four English skills, the students perceived Gemini as most useful in enhancing their reading. This is due to the GenAI chatbot's capabilities in explaining difficult vocabulary. However, it was also noted that Gemini often demonstrates accuracy problems, in which students have learned to cross-check the information being presented and evaluate its response critically instead of blindly trusting the machine. To conclude, the researchers also emphasized the importance of coordinated support across pedagogical, policy, and infrastructural dimensions. Given the findings, this study was deemed relevant to the current research as it highlights the fact that students have grown aware and learned to be cautious while using GenAI chatbots in their reading.

For the thirteenth study, it was done by Aldreabi, Dahdoul, Alhur, Alzboun, and Alsalihi (2025). The goal of this quantitative cross-sectional study was to investigate the factors that influence the willingness and enhance the reading comprehension of higher education students in adopting GenAI chatbots. Using a survey, the data were gathered from 374 students from Jordanian public universities during the academic year 2023/2024. The result of this study revealed that the GenAI chatbots' ease of use and availability were found to be the students' main reasons for using them. The researchers concluded their study by underlining that practical utility and accessibility of the GenAI chatbot seemed to outweigh its enjoyment in use and even high accuracy output, signaling a change in students' perceptions of what is important in educational technology and learning experience. This study underscored the factors that may influence higher education students to use a GenAI chatbot in supporting their English reading comprehension, making it relevant to the topic of the current research.

Carried out by Ma'rifah, Masrifah, and Arifani (2021), the fourteenth study purpose was to explore the impact of educators' beliefs in using technology towards EFL students' engagement and practices in learning. This quantitative study employed a survey that involved as many as 125 EFL educators and 125 EFL students from the 2019/2020 academic year across several secondary schools in Indonesia. From what was gathered, the researchers found that the majority of the EFL educators were still adopting the rule-based oriented pedagogical beliefs, in which the lessons are centered around grammar rather than anything else. In addition, their view of technology in particular was somewhat positive, with many emphasizing the importance of integrating it within the EFL classroom and its potential in improving EFL students' learning engagement. The researchers concluded their study by underlining that EFL educators' pedagogical beliefs can indeed influence students' adoption and practice in using technology for their English language learning activities. Given the implication, this study was deemed relevant to the current research as it highlighted

how teachers may either encourage or discourage EFL undergraduate students to use GenAI chatbots within their academic reading and for their English reading comprehension.

Previous studies have also discussed the practical application of GenAI chatbots to facilitate EFL students' reading comprehension. Carried out by Vorobyeva, Belous, Savchenko, Smirnova, Nikitina, and Zhadanov (2025), the purpose of the fifteenth study was to investigate the current state of personalized learning, including the pedagogical approaches taken and challenges found by EFL students. This systematic literature review study involved thoroughly reviewing a total of 30 publications. From there, it was revealed that ChatGPT and other machine learning technologies were the main tools used, especially within language learning education. In addition, the GenAI chatbot's usefulness was mostly attributed to its immediate feedback systems and adaptive content generation. Meanwhile, the commonly mentioned challenges regarding its utilization were the technical constraints, concerns on data privacy, difficult curriculum integration, and underprepared teachers. The researchers concluded their study by underlining the need for a strategy that addresses all of the issues mentioned before in order to make use of the technology's potential to the fullest. This study underscored the challenges that EFL students may encounter while making use of the GenAI chatbot to facilitate their English reading comprehension, making it relevant to the current research's topic.

For the sixteenth study, it was carried out by Fitria (2025) with the goal of describing the two most popular GenAI chatbots, Gemini and ChatGPT, regarding their utilization within the English language learning context. The scope of this descriptive qualitative study was the features that are offered by each of the GenAI chatbots and how the English education community makes use of them. The data of this study consisted of any information about the features and capabilities of ChatGPT and Gemini that were stated or published on their official websites, respectively, and externally, such as forums, related articles, or case studies that discuss their

application within the world of education. The analysis result showed that both GenAI chatbots emphasized personalization, interactivity, and teaching efficiency, but with different focuses. Ultimately, in deciding which GenAI chatbot to use, it depends on the user's purpose of use. ChatGPT was noted for its text-generation and interactive text-based conversation, while Gemini was highlighted for its multimodal capabilities and operates within the Google ecosystem, which makes it more versatile with multimedia tasks. Considering the findings, this study is seen as relevant given its framing of GenAI chatbots as similar yet different tools with their own strengths and weaknesses, serving as something that EFL undergraduate students might consider before using.

The seventeenth study was conducted by Susilowati, Zainuddin, and Islam (2025). The researchers aimed to investigate the role of Meta AI, an in-built feature of the WhatsApp messaging app, in enhancing EFL higher students' reading comprehension skills and explore the existing challenges while utilizing the tool. The data of this qualitative descriptive study were gathered from interviews and an open-ended questionnaire, involving 5 students from the English Education Department at Zainul Hasan Genggong Islamic University who were purposely selected based on their experience and willingness to take part. The findings of this study revealed that MetaAI has facilitated students' English reading comprehension skills through its several features, including translation, grammar correction, and dynamic question and answer sessions. Additionally, it was found that the GenAI chatbot has increased the EFL students' reading motivation and engagement with the English academic reading materials. Considering the findings, this study is seen as relevant to include as it highlights Meta AI's capabilities that can potentially enhance EFL undergraduate students' English reading comprehension.

The eighteenth study was done by Herdawan, Sari, and Setyoningrum (2026). This qualitative case study aimed to explore how ChatGPT can enhance the success of an Extensive Reading

program within the context of English as a Foreign Language, involving as many as 38 second-year students from the Politeknik Maritim Negeri Indonesia during the 2024/2025 academic year. The data of this study were gathered through semi-structured interviews, serving to understand EFL students' practices in utilizing the GenAI chatbots for their reading. The analysis result shows that the integration of ChatGPT in the Extensive Reading program was able to weaken the linguistic and interaction barriers, providing support in the form of discussion in circumstances where human interaction is limited or anxiety-inducing. Furthermore, it helps students in evaluating whether the English reading material they are reading aligns with their interests or is appropriate to their language level. Considering the findings, especially in relation to EFL undergraduate students' reading, this study was deemed relevant to the current research as it underscored a GenAI chatbot's capability to support their comprehension via discussion.

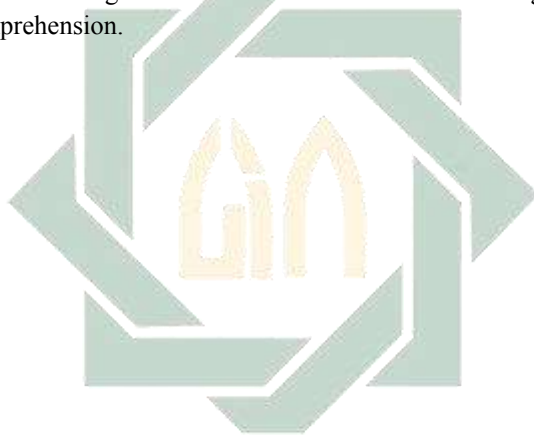
Conducted by Huang, Hwang G.J., Chen, and Hwang G.H. (2026), the nineteenth study intended to investigate the effects of GenAI chatbots in employing the graphical summarization strategy with semantic comprehension on students' reading comprehension performance and reading experience. This quasi-experimental study involved a total of 107 grade 10 students who were then randomly divided into four different groups: those who used GenAI chatbot-based graphical summarization, GenAI chatbot-based text summarization, graphical summarization learning, and text summarization learning strategy. From the experiment, it was found that both graphical summarization strategies, whether AI-based or done by themselves, were proven to improve students' reading comprehension performance. Moreover, the findings also suggest that combining the two strategies will yield a more effective result, enhancing not only their comprehension but also critical thinking and metacognition as well. This study is deemed relevant to the current research as it shows the potential of GenAI chatbots facilitating students' reading

comprehension by giving both text and graphical summarization of the academic reading material.

Carried out by Li (2025), the purpose of the twentieth study was to examine EFL undergraduate students' practice of implementing the source text strategy to summarize reading materials across different genres. This study involves a total of 80 students from a Chinese university, where their draft of written summaries was compared to the original wording of the source materials. The analysis result revealed that the students were heavily relying on the source materials to make their summaries. It was also noted that those who are more proficient showcased many paraphrases, while those who are less proficient often copied the exact wording of the source materials. This study underscored the possibility of how EFL students would make notes of their academic reading materials based on a summary generated by the GenAI chatbots, making it relevant to the current research's topic.

Based on the findings of previous studies above, the use of GenAI chatbots by EFL students within their academic reading has been explored before. In regard to its potential and impact on students' reading comprehension, it was found that the tools are useful in making reading easier, more efficient, as well as increasing the EFL students' reading motivation and confidence. Meanwhile, in relation to studies about EFL students' and educators' perceptions and influences that may prompt the use of GenAI chatbots in students' reading activity, it was found that the tool was deemed as a valuable and flexible learning companion, easy to reach and make use of, should be utilized with caution, and that students' adoption of it may be influenced by their educators beliefs. As for the studies that discussed their practical application, the GenAI chatbots were able to facilitate EFL students' reading comprehension by providing personalized reading assistance such as explanation, discussion, vocabulary clarification, inference support, summarization, and comprehension feedback. However, past studies have also emphasized the risk of students over-relying and misusing the tool, concerns over language accuracy, and the

lack of clear guidelines and regulations on AI use. Considering these existing challenges, it should first be asked what and how EFL students are currently using the GenAI chatbots. Although some had already discussed its practical application in reading, the majority of the studies were set in a controlled setting. Therefore, serving as a case study, this research aims to investigate the GenAI chatbots that EFL undergraduate students use and explore their ways of using the said tool to facilitate their English reading comprehension.



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CHAPTER III

RESEARCH METHOD

In this third chapter, the researcher elaborated the methodology of the research in detail. This section includes the research design, the role of the researcher, the participants involved, the research settings, the instruments used, the data collection and analysis technique, and a run down of the research stages.

3.1 Approach and Research Design

This research has taken the qualitative approach and adopted the case study design, given its focus on the recent use of GenAI chatbots by EFL undergraduate students while engaging with English academic reading materials. As highlighted by Yin (2018), the case study design is very suitable to utilize when a researcher wants to thoroughly investigate a contemporary phenomenon within its real-life context. Moreover, it is most well-suited to answer “why” and “how” question-centered research. For this research in particular, the design was used to investigate the GenAI chatbots that students use and explore their implementation of reading comprehension strategies through the said chatbots. Considering that the objective is to describe the use of GenAI chatbots by EFL undergraduate students to facilitate their English reading comprehension, this research is a descriptive single case study that involved only English Language Education Department (ELED) undergraduate students from the Islamic State University of Sunan Ampel Surabaya (UINSA). An open-ended survey and individual interview session were carried out to gather all of the necessary data for this qualitative case study.

3.2 Researcher Presence

As this research is a case study by design, the researcher was careful not to intervene, affect, or manipulate the context or people involved in the research. This action was taken based on Yin's (2018) emphasis towards researcher presence in case studies, which was to remain as non-intrusive and unobtrusive as possible

in order to preserve the authentic context of the phenomenon. Therefore, in collecting the data, the researcher's role is limited to designing the research instrument and providing participants with the time and space where they can safely give their responses. In this sense, the researcher was to distribute an open-ended survey for the participants to fill out. Meanwhile, the semi-structured interview was carefully carried out in order to remain as neutral as possible.

3.3 Research Setting and Participant

This research was carried out at the Islamic State University of Sunan Ampel Surabaya (UINSA), located at Jl. Ahmad Yani No. 117, Wonocolo, Surabaya, East Java. The setting was chosen following the case of this research, where undergraduate students from the English Language Education Department (ELED) were given permission by some lecturers to utilize AI technologies within their studies, granted that they do so constructively and responsibly. Additionally, it was also known that the students have been found using GenAI chatbots while reading English academic reading materials. Hence, considering the context, there exists an opportunity for the researcher to investigate and explore EFL undergraduate students' use of GenAI chatbots in facilitating their English reading comprehension.

As for the participants of this case study, it involved undergraduate ELED students ranging from the 2nd, 4th, 6th, and 8th semesters during the 2025-2026 academic year. An open-ended survey was shared to gather and screen potential participants, which were those who have been routinely using a GenAI chatbot to help with their academic reading at least once a week and do so for at least 3 months. Through it, 34 out of the 37 respondents were found in accordance with the established criteria and were taken as the participants for this research. The data gathered from them was used to investigate the GenAI chatbots that students use while reading. Afterwards, 8 students were purposefully selected based on their semester level (2 students from each semester) and their

purpose for using it to explore EFL undergraduate students' implementation of reading comprehension strategies through GenAI chatbot-mediated reading.

3.4 Data and Source of Data

The data for this qualitative case study were the GenAI chatbots that EFL undergraduate students reported using and their implementation of reading comprehension strategies through the said chatbot to facilitate their English reading comprehension. To answer the first research question, information was gathered about the name of the GenAI chatbot that students prefer to use the most while reading, and their reason for using it. As for the second research question, information was gathered regarding students' purpose for using the GenAI chatbot (in relation to implementing which reading comprehension strategies), their extent of using it, and their response towards the assistance.

The source of data for the case study was undergraduate ELED students from UINSA who met the criteria established before. The participants of this research consisted of 2nd, 4th, 6th, 8th semester students from the 2025-2026 academic year who have been using a GenAI chatbot to help with their academic reading for at least 3 months and at minimum once a week. Hence, the participants were those who are familiar enough with using GenAI chatbot while not necessarily being experts themselves (X. Yin et al., 2025). From the open-ended survey, 34 eligible participants were gathered: 6 students from the 2nd semester, 5 students from the 4th semester, 7 students from the 6th semester, and 16 students from the 8th semester. Then, 2 students from each semester (8 in total) were purposefully selected to join a follow-up individual interview session. This, in turn, allowed for an equal representation of students from different semesters while remaining manageable to conduct an in-depth qualitative analysis.

3.5 Data Collection Techniques

Considering the objectives of this research, an online survey and individual interview sessions were carried out to gather the necessary data. The details of the implementation are as follows.

3.5.1 Online Survey

The online survey was carried out to collect data about the name of the GenAI chatbot that students prefer to use the most while reading, their reason for using it, and their purpose for using it (in relation to implementing which reading comprehension strategy). The survey was made available using Google Forms and kept open for a week for the participants to fill out, lasting from the 10th-16th of June 2026. The survey was closed upon reaching the targeted number of participants from each semester (at least 5), garnering a total of 34 eligible participants. Additionally, a space was given for students to state their consent agreement and contact information regarding the follow-up interview.

3.5.2 Individual Interview

The individual interview session was carried out to further understand students' reasons for using GenAI chatbots while reading, their extent of using it, and their response towards its assistance. In order to save time and resources, the interviews were done online via Zoom, a video conferencing platform. It was also documented in the form of audio and video recordings, later transcribed to be analysed. The individual nature of the interview also enables participants to elaborate on their use of the GenAI chatbot in depth, unique to their own preference and context, with each session lasting about 20-30 minutes. In order to minimize the risk of misunderstandings and anxiety caused by limited English proficiency, the interview was also done using the Indonesian language.

3.6 Research Instruments

To collect the data for this qualitative case study, an open-ended questionnaire and semi-structured interview guideline were prepared. The details of the mentioned research instruments are as follows.

3.6.1 Open-ended Questionnaire

Considering its purpose, the questions asked within the open-ended questionnaire covered the following: (1) the name of the GenAI chatbot students prefer to use the most, (2) their reason for using the GenAI chatbot, and (3) their purpose for using the GenAI chatbot. The questionnaire was self-developed based on the findings of related previous studies and theories, as well as reviewed and validated by an expert on this subject. In its design, the questionnaire was created using Google Forms and was written in the Indonesian language, allowing for an easy distribution and minimizing misunderstanding. Moreover, a separate section was designated for participants to read a brief explanation about the research being conducted, state their consent of participation, and optionally share their contact information for interview purposes.

3.6.2 Semi-Structured Interview Guideline

The semi-structured guideline was prepared to gather data about the following: (1) students' reasons for using a GenAI chatbot, (2) their extent of using the GenAI chatbot, and (3) their response to the assistance given by the GenAI chatbot. The interview guideline was also a self-developed instrument, its questions were derived from the findings of related previous studies and theories, and have been reviewed and validated by an expert on this subject. In its design, the questions were written in the Indonesian language, with each session lasting about 20-30 minutes. Additionally, as a semi-structured interview guideline, prompts were also given to encourage participants to be

thorough with their responses (Mathers et al., 2002). Moreover, this guideline was meant to be used generally for all participants, while also paying attention to each student's "purpose for using" previously mentioned in the survey. This was taken into consideration as it may differ from one student to another.

3.7 Data Analysis Technique

Given the nature of the data of this qualitative case study, thematic analysis was employed to uncover the themes surrounding the GenAI chatbots students used and their implementation of reading comprehension strategies through the said chatbots. This was in line with Dawadi's (2020) statement, which highlights thematic analysis as a flexible yet also structured approach of identifying, analyzing, and reporting the themes found within a data set. Therefore, this research's data was analysed as follows.

3.7.1 Familiarization with the Data

In an attempt to first familiarize oneself with the raw data, the researcher briefly and holistically read through the survey and interview responses. This was done with the intention of gaining a general sense of the ideas that were highlighted by the participants. While doing so, rough notes were made and highlights were given to make aware of the important sections, particularly those that are unique or commonly mentioned. The reading was done multiple times until the researcher grasped the overall message or pattern the participants' trying to showcase.

3.7.2 Generating Initial Codes

The second step was to organize the found important sections by assigning them with codes. Both of the data were coded using descriptive codes that summarize the core idea of the excerpt in the form of 2-5 words. However, within the practice, a letter will be given in place of the descriptive codes to simplify and accelerate the coding

process. For example, the letter “a” is given to excerpts that have “*understand easier*” as its main idea, while the letter “b” is given for excerpts that have “*navigate reading difficulties*” as its main idea. Additionally, for the reading comprehension strategies identified, the codings given are as follows: “APK” for activating prior knowledge, “OV SK” for overviews-skimming, “IN” for inferring, “DM” for determining meaning, “MN” for making notes, and “EV RF” evaluating-reflecting. The coding process itself was done simultaneously as the researcher re-read the whole data more thoroughly, going over them line by line while paying mind to the sections previously deemed as relevant or interesting. Meanwhile, in regard to the participants, an abbreviation formula was established to protect their identities. For example, the first 4th-semester student is addressed as P2A, while the second 4th-semester student is addressed as P2B, with the alphabet being the order of submission.

3.7.3 Searching for Themes

The third step was to review and connect the codes together, grouping those that share similar ideas under the same category or sub-themes. Therefore, the themes found within the data of this research revolved around the name of the GenAI chatbots that students used, their reason for using it, their purpose for using it, the extent of their use, and their response towards its assistance. In doing so, the researcher also paid mind to what previous related studies have revealed before.

3.7.4 Reviewing Themes

Once the codes were grouped together, the researcher then carefully reviewed all of the potential sub-themes, ensuring that the codes under them were relevant. During the said process, some sub-themes are merged while others are split, and even discarded. This is done to ensure clarity

and preserve the focus of the research, which is to investigate GenAI chatbots that students used while reading and explore their implementation of reading comprehension strategies through said GenAI chatbots to facilitate their English reading comprehension.

3.7.5 Defining and Naming Themes

The fifth step was to finalize the themes by refining the phrasing, which was done to ensure that it appropriately addresses the research questions that were established in previous chapters. While doing so, a brief description of the themes was given to highlight their purpose in answering the research questions. The researcher has also paid close attention to the sub-themes that are under each theme, making sure that it was relevant to the presented theme.

3.7.6 Writing the Report

The final step was to report the analysis result in a clear and convincing manner. In its practice, the researcher had compared the found themes with the findings of similar studies, making sure to include relevant evidence and analytics commentary in the writing. Afterwards, interpretation on the result of the research was also made while remaining grounded to the theoretical frameworks and previous studies that have been compiled in the previous chapters.

3.8 Trustworthiness

In ensuring the validity and reliability of this qualitative case study, several measures were taken following Yin's (2018) criteria of a good research design. First, to construct validity, this research employed two data collection techniques: an open-ended survey and a semi-structured interview. Moreover, during the data analysis phase, the results of this research were compared with the findings of other relevant previous studies. Secondly, the reliability of this qualitative case study was ensured by conducting an audit

trail. In doing so, the researcher has compiled and organized all of the data gathered, as well as documented the whole thematic analysis process within a designated spreadsheet. The said spreadsheet can be accessed through the link attached within the appendix (see Appendix 2).

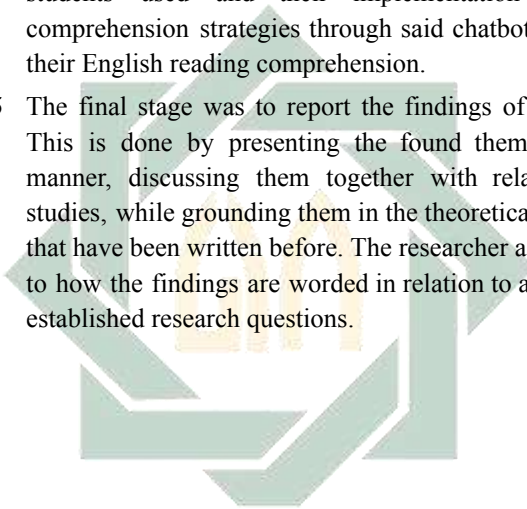
3.9 Research Stages

This research was carried out following Yin's (2018) framework for case studies, which divides the research into six different stages: planning, preparing, collecting the data, analyzing the data, and lastly reporting the research. The details of how each stage was conducted are elaborated below.

- 3.9.1 During the planning stage, the researcher first decides on which topics can potentially be delved into. This is done by identifying any research gaps, compiling relevant information to serve as the research background, formulating the research questions, and establishing the research objectives. In regard to this, related theories and previous studies were reviewed to help ground the research.
- 3.9.2 In the preparation stage, the researcher began to sort out the methodology of the research. The researcher determines the approach and design of the research, which data collection and analysis techniques to use, along with the instruments, as well as the method to ensure the validity and reliability of the research.
- 3.9.3 The third stage was to collect all of the necessary data. For this qualitative case study in particular, the data consisted of responses from undergraduate ELED students from UINSA, ranging from the 2nd, 4th, 6th, and 8th semesters during the 2025-2026 academic year. These responses were in the form of a filled-out survey, voice, and video recordings.
- 3.9.4 During the data analysis stage, responses gathered from the open-ended survey and semi-structured interview were then analysed using the thematic analysis technique. However,

the data are first organised, transcribed, and translated into English to ensure that nothing is amiss and ready to be analysed. The patterns and themes found within the data serve as the findings of this qualitative case study, which revolves around the GenAI chatbots that EFL undergraduate students used and their implementation of reading comprehension strategies through said chatbots to facilitate their English reading comprehension.

- 3.9.5 The final stage was to report the findings of the research. This is done by presenting the found themes in a clear manner, discussing them together with related previous studies, while grounding them in the theoretical frameworks that have been written before. The researcher also paid mind to how the findings are worded in relation to addressing the established research questions.



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CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

The fourth chapter is designated to present the findings and discussion of this research in a manner that appropriately answers the research question stated in the chapters before.

4.1 Findings

The purpose of this research are to investigate and explore EFL undergraduate students' use of GenAI chatbots to facilitate their English reading comprehension, which were encased in the following research questions: (1) What GenAI chatbots do EFL undergraduate students use to facilitate their English reading comprehension? (2) How do EFL undergraduate students implement reading comprehension strategies through GenAI chatbot-mediated reading? The answer for the first research question is presented under the section of "Generative AI Chatbot Students Used to Facilitate Reading Comprehension" section, while the second is written under the section of "Students' Implementation of Reading Comprehension Strategies through Generative AI Chatbot-Mediated Reading."

4.1.1 Generative AI Chatbot Students Used to Facilitate English Reading Comprehension

The open-ended survey revealed four GenAI chatbots that EFL undergraduate students have commonly been using in their reading. The data was gathered from a total of 34 respondents, with the majority reporting to have used ChatGPT as their preferred GenAI chatbot (26 students), followed by Gemini (6 students), Perplexity AI (1 student), and Meta AI (1 student). Moreover, it was noted that 25 of the respondents were known to be using the GenAI chatbots several times a week, and 9 of them just once a week. In regard to their reasons, it was found to be similar across the four GenAI chatbots. Students have reasoned that their use of the GenAI chatbot in reading was

because of its flexibility, familiarity, practicality, and clear source attribution, as well as their need for easier reading, quicker reading, and lecturer's recommendation. However, given that there are some differences in detail, the reasons are described separately for each of the chatbots. Thus, the findings of the first research question are presented as follows.

a. ChatGPT

ChatGPT was found to be the GenAI chatbot that most participants have preferred to use in their academic reading, with 26 out of 34 of them reported using it. When asked about their reason, many often attribute it to making reading easier. Additionally, ChatGPT was also used due to its flexibility, familiarity, and in making reading quicker. The following are students' reasons for using ChatGPT to facilitate their reading comprehension described in detail.

1) Students Use of ChatGPT for Easier Reading

The main reason participants use ChatGPT in their academic reading was because of their need for easier reading, the same notion being shared by 18 students. The said reasons include ChatGPT being able to make the English-based reading material easier to understand, alleviate reading difficulties, reassure students of their understanding, and help them when feeling burnout. From the data gathered, it was first noted that 9 students have asked ChatGPT to make the reading material easier to understand. One student, P8C, shared that they would ask ChatGPT to simplify the language and explain the content of the reading material to them in a concise manner.

“Sometimes I use it (ChatGPT) to summarize and explain the reading material in a language that is easier to understand.” (P8C)

In regard to reading difficulties, 7 Students were also found using ChatGPT to alleviate said difficulties, whether it is in relation to the topic they are reading or the language itself. One student (P2B) shared that they would seek the Chatbot for help when stumbling upon a material they deemed difficult to understand. Meanwhile, a different student, P4C, has asked ChatGPT to help translate the text in order to fully understand its content.

“Depending on the material I'm studying, if I find it difficult to understand, I'll ask the AI chatbot for help.” (P2B)

“... I use an AI chatbot to ask for a translation to understand the content of the text that I have not fully understood yet.” (P4C)

Similarly, from the interview, student P4D has noted that they would use ChatGPT not only when the reading material is too difficult, but also when it is lengthy to read.

“So, I would open the book first, briefly. Then, if I have trouble understanding or it is too long, I end up going to ChatGPT.” (P4D)

Additionally, 5 students were also known to use ChatGPT because they felt “unsure” regarding their understanding of the reading material. Regarding this, student P8L explained that the chatbot helped them to be less confused and more confident in trying to comprehend the text they were reading. Meanwhile,

the rest of the students leaned more towards their want for accuracy, as shown in the following excerpt.

“... Generative AI makes the learning process even more efficient and less confusing. I also felt more confident in trying to understand the academic reading materials.” (P8L)

“... It (ChatGPT) helps me to understand the reading material more quickly as well as accurately ...” (P8I)

Lastly, 5 students were known to use the chatbot when they were experiencing burnout or feeling tired in general. According to one of the students, P8C, ChatGPT has indirectly allowed them to redirect their energy and focus on completing their assignments rather than the actual reading itself, especially when feeling burned out. The sentiment was also shared by another student (P8B), who said that they would use the chatbot when feeling tired or simply “too lazy” to read the material deeply.

“Because it (ChatGPT) is very helpful, especially when feeling burned out but I still need to work on my assignments.” (P8C)

2) Students Use of ChatGPT Due to Its Flexibility

Students’ choice for using ChatGPT in reading was also because of how flexible the GenAI chatbot is in providing them with reading assistance, with the reason being shared by 15 students. The flexibility mentioned refers to ChatGPT’s capabilities to be used at any time, as well as personalized in accordance with the students’ preferred language and behaviour, notably through its personalization setting. Based on

the open-ended survey, 7 students have reported about its time flexibility. Student P2C shared that they would use the chatbot “at any time” whenever they need some reading assistance. Another student (P6D) even interestingly added that using ChatGPT is simply “more convenient than waiting for a friend.” A similar notion was also echoed during the interview, as stated by P8C.

“Because I want to use it (ChatGPT) whenever I need it ... So, without needing to be mindful of its time and feelings.” (P8C)

Besides being flexible in time, ChatGPT’s capability of adjusting its own language to “match” that of the user was also highlighted by 10 students. This language personalization was known to include the complexity and tone (i.e., formal or casual) of the chatbot’s language. All of which resulted in responses that are clear, easy to understand, as well as in tune with what the students both prefer and need. This is showcased by the following excerpts gathered from the open-ended survey.

“Because ChatGPT ... can also match its language tone similar to ours ...” (P8B)

“I could understand it (reading material) due to ChatGPT's explanation, because my ChatGPT uses simpler sentences.” (P2D)

“I prefer ChatGPT more because its responses are easy to understand, with detailed explanations, and that is flexible to my learning needs. Additionally, it also responds ... with flexible language.” (P8L)

However, in contrast to the other GenAI chatbots, there were only 2 students who were known to be aware and have made use of the ChatGPT's settings to manually personalize their chatbot. As shown by student P6G, specifically in regards to their chatbot's language tone.

"Because ChatGPT's language can be set, so that it is neither too casual nor formal."
(P6G)

Additionally, it was known that the setting feature was also used to give instructions on how the chatbot should behave. This was based on a student's explanations (P8C) during the interview, where they had specifically asked their ChatGPT to be critical and unbiased with them.

"Yes, I have set it exactly as I wanted it to be ... like who to call me, not taking my side, not always validating me ... If I am wrong, then tell me that I am wrong." (P8C)

3) Students Use ChatGPT Due to Its Familiarity

Another reason as to why students used ChatGPT in their reading was because of the tool's familiarity, which was shared by 15 students. The said familiarity refers to ChatGPT being one of the well-known GenAI chatbots that students came to know. Within the open-ended survey, one student (P8I) explained that their preference for ChatGPT was due to it being one of the "first" GenAI chatbots that they have encountered. A similar notion was shared by another student (P8P), adding that ChatGPT is "already well-known and frequently used by other AI users." Meanwhile, a different student (P6D)

explained that their choice to use ChatGPT was because they had grown comfortable using the GenAI chatbot, even stating that they “have known ChatGPT for a while.”

4) Students Use of ChatGPT for Quicker Reading

In their need for quicker reading, 7 students were found using ChatGPT to make the reading process brief. One student (P4D) shared that the chatbot is helpful in making them understand the text “in a short amount of time.” Later during the interview, the student also added that it is especially useful when reading lengthy materials.

“Yes, the main reason is to save time. After all, articles and books are quite long, right? So, it's almost impossible to read them manually from start to finish.” (P4D)

From the findings above, it was found that students’ preference for using ChatGPT to support their English reading comprehension was based on four reasons. The first and most reported reason was the use of ChatGPT to fulfill their need for easier reading, which was by making the reading material easier to comprehend, alleviating reading difficulties, reassuring students’ understanding, and helping them while feeling burned out. The second-mentioned reason was attributed to ChatGPT’s flexibility when being used, with it being able to adapt to users’ time, language, and preferences, notably through the chatbot’s personalization setting. The third reason was attributed to ChatGPT’s familiarity, noting that it was their first and most well-known chatbot that they had ever used. The last reason was to fulfill their need for quicker reading, helping students comprehend a lengthy text in a short amount of time. Ultimately, the data show that the

use of ChatGPT was mainly to make reading easier rather than any other mentioned reasons.

b. Gemini

Through the open-ended survey, Gemini was found to be the second most preferred GenAI chatbot to be used by students in their academic reading. Among the 6 students who reported using it, most of them have attributed it to Gemini's flexibility, followed by their need for easier reading, its clear source attribution, their need for quicker reading, as well as due to the lecturer's recommendation. The details regarding students' reasons for using Gemini to facilitate their English reading comprehension are described as follows.

1) Students Use of Gemini Due to Its Flexibility

The main reason as to why students prefer Gemini specifically to help in their academic reading was because of the flexibility that the GenAI chatbot offered, with the sentiment being shared by 5 students. The said flexibility refers to Gemini being able to be used whenever and wherever needed, used along with other Google applications, and responding in a way that is preferred by the students. According to the open-ended survey, 3 students used Gemini because it can be used whenever and wherever they need it, which was represented by P2E's statement below.

"It (Gemini) can be used at any time and anywhere, just easy to access it." (P2E)

Moreover, given that Gemini is a part of the Google brand, students were able to use other Google applications that are integrated within the chatbot (i.e., Google Docs, spreadsheets, and YouTube). As

highlighted by student P8A, which can be seen in the following excerpt.

“Gemini ... can be integrated with other Google applications such as google sheets, docs, and YouTube.” (P8A)

Additionally, 4 students have shared that their use of Gemini was because of the responses that the chatbot can give to them, noting that it is “very easy to understand.” For student P8M in particular, this was due to Gemini answering them using “human-like as well as detailed responses.” Meanwhile, another student (P8D) has emphasized how in tune Gemini was in responding to their want, going as far as to state, “it feels like Gemini can read through my mind.”

2) Students Use of Gemini for Easier Reading

From the survey, there were 4 students who reported having been using Gemini because of their need for easier reading. This need was derived from students noting that the chatbot was useful in helping make the reading material easier to comprehend and reducing their reading difficulties. One student (P8M) shared that they would ask Gemini to summarize the “lengthy reading material” so that it is easier to read. Additionally, student P8J explains that when confused, they would ask the chatbot for providing them with “very easy to understand explanations.”

3) Students Use Gemini Due to Its Clear Source Attribution

Students’ choice for using Gemini was also found to be because of the chatbot’s practice of clearly attributing the source of its responses, the

reason being shared by 3 students. One of them (P4E) dared to claim that the chatbot is “more accurate” than the other GenAI chatbots. Within the interview, student P4E further shared that they have switched to using Gemini, explaining that the link that the other GenAI chatbot gave them was “dubious and lacking.” In contrast to this, student P8A was found to be wary of Gemini’s “inaccuracy”. They even noted that users should make sure whether the information that was given to them was in accordance with what was being asked for, as seen in the following excerpt.

“It (Gemini) responds quickly and satisfies my expectation, although sometimes it is necessary to double-check whether the information given is precise or not.” (P8A)

4) Students Use of Gemini for Quicker Reading

Another reason as to why students used Gemini in their academic reading was because of their need for quicker reading. There were 2 students that shared this reason, P8M and P8A. Within the survey, P8M noted that using Gemini while reading will “save time.” P8A added that by using Gemini, they were able to comprehend the reading material both “more quickly and comprehensively” at the same time.

5) Students Use Gemini Due to Their Lecturer’s Recommendation

Only 1 student reported to have been using Gemini specifically because it was the GenAI chatbot that their lecturer had recommended to them. From the open-ended survey, student P2E explained that because Gemini was the one that got recommended by their lecturer, they felt more comfortable using it in their reading.

“I feel more comfortable using Gemini because Gemini was recommended by my lecturer ...” (P2E)

In regard to this, within the interview, student P2E added that the lecturer “once taught” them how to use it as well, specifically about prompt making.

“I was once taught by [lecturer]. In making the prompt, when wanting help from AI, then we should tell the AI about ourselves first ... So, I positioned myself as who I am supposed to be and then what I came to Gemini for.” (P2E)

Based on the findings above, students’ preference for using Gemini in facilitating their English reading comprehension was derived from five reasons. The most commonly mentioned one was the use of Gemini due to its flexibility, which includes its time and language flexibility, as well as integration of Google applications. The second reason was to make reading easier, noting that it helps them make the reading material easier to understand and alleviate their reading difficulties. Students have also reported using Gemini because of its practice of clearly attributing the source of its responses. The fourth reason was due to the chatbot enabling them to read more quickly as well as comprehensively. The last reason was due to the lecturer, having recommended and advising them on how to use Gemini effectively in their study. Despite the varied reasons, the data show that Gemini was used mainly due to flexibility rather than any of the other reported reasons.

c. Perplexity AI

From a total of 34 participants, there was only 1 student (P2F) who reported using Perplexity AI in their reading. When asked about their reason, the said student chose to highlight the chatbot's practicality. Through the open-ended survey, the student explained that Perplexity AI can simply be accessed within a third-party messaging application (i.e., WhatsApp).

“Because it is practical. I just need to access it through WhatsApp.” (P2F)

Additionally, student P2F also shared how using Perplexity AI helped to make their learning process “more practical”, sharing that they used the chatbot to ask for explanations and broaden their knowledge.

“To broaden my insights and learning becomes more practical when explained by AI.” (P2F)

Considering the findings above, the students' use of Perplexity AI in supporting their reading comprehension was centered around the idea of practicality. In relation to reading itself, Perplexity AI was deemed useful in making the process more practical. Meanwhile, as a GenAI chatbot, Perplexity AI's accessibility within a third-party messaging application (i.e., WhatsApp) made it practical for them to use. Therefore, the student's preference for Perplexity AI was derived from their want for practicality, both the chatbot and the reading process itself.

d. Meta AI

Based on the open-ended survey, Meta AI was also found to be used only by 1 out of the 34 participants in relation to their reading. Similarly, the student's reason

for using the chatbot revolved around its practicality. Given that the chatbot is a built-in feature of a messaging application (i.e., WhatsApp), Meta AI was thought to be easy and simple to use.

“Because Meta AI is in WhatsApp, so it's easy and simply simple to use.” (P2A)

Moreover, the student also claimed that Meta AI was just fairly easy for them to access.

“Because the AI is relatively easy to reach.” (P2A)

Given the findings above, the use of Meta AI by students to facilitate their English reading comprehension was more because of the GenAI chatbot's practicality rather than its usefulness in the reading process itself.

Altogether, the findings revealed that there are four GenAI chatbots that EFL undergraduate students have reported using in their academic reading. It was also noted that the majority of the participants preferred to use ChatGPT, followed by Gemini, Perplexity AI, and Meta AI. These preferences were derived from students' need for easier and quicker reading, the lecturer's recommendation, as well as the GenAI chatbots' flexibility, familiarity, practicality, and clear source attribution. For ChatGPT in particular, students mainly used them for easier reading. Gemini on the other hand was used mainly due to its flexibility. Meanwhile, Perplexity AI and Meta AI were used based on the idea of practicality. However, unique to ChatGPT, students have also highlighted its familiarity and personalization settings. Gemini was also found distinct in its integration of other Google applications, practice of clear source attribution, and being the only chatbot that was

recommended by the lecturer. Ultimately, the GenAI chatbots that EFL undergraduate students used to facilitate their reading comprehension were mainly highlighted for their capabilities in helping students read more easily, flexibility, and practicality.

4.1.2 Students' Implementation of English Reading Comprehension Strategies through Generative AI Chatbot-Mediated Reading

From the data collected, the implementation of reading comprehension strategies by EFL undergraduate students through GenAI chatbot-mediated reading revealed the details and alterations in how the strategies were traditionally carried out. In relation to the four GenAI chatbots that students have preferred to use in their academic reading, it was found that students mainly used ChatGPT to assist in implementing the overviewskimming (22.8%) and the inferring strategy (22.8%). Similarly, Gemini was used to help with the implementation of the overviewskimming strategy (22.2%) and the determining meaning strategy (22.2%). For Perplexity AI, the Gen AI chatbot was used to implement the overviewskimming strategy (100%). Meanwhile, Meta AI was used to assist with the implementation of determining strategy (100%). When taken together, the GenAI chatbots were commonly used to help in implementing the overviewskimming strategy, followed by the determining meaning, inferring, evaluating-reflecting, activating prior knowledge, and making notes strategies. Through the interview, the extent of the GenAI chatbot's help and students' response towards it were also uncovered. Given that the practical application across the four GenAI chatbots are similar to one another, the findings of the second research questions are presented collectively, starting from the most to the least

implemented reading comprehension strategy in a GenAI chatbot-mediated reading.

a. Generative AI Chatbot-Mediated Implementation of the Overviewing-Skimming Strategy

From the survey, there were 26 EFL undergraduate students found implementing the overviewing-skimming strategy using GenAI chatbots, making it the most frequently enacted reading comprehension strategy. As for the GenAI chatbots themselves, 21 students used ChatGPT, 4 students used Gemini, and 1 student used Perplexity AI. Through the semi-structured interview, it was later uncovered that the implementation of the overviewing and skimming strategy through the said GenAI chatbots were found to be to be the same, consisting of students briefly reading the material on their own beforehand, then asking the GenAI chatbot for an overview of the reading material, and cross-checking the AI-generated overview. The details of their request and action taken are as follows.

Before utilizing the GenAI chatbot, 6 students reported that they would briefly skim over the reading material first. Students P4D explained that they would use the generative when reading material is deemed “too lengthy” to read or when they “have trouble understanding” the content of it. However, this was not always the case. This was apparent as one student (P8M) explicitly shared that they would sometimes immediately rely on the chatbot if they did not feel like reading.

“Sometimes I would skim through it first. But sometimes, if I'm feeling too lazy to read, I would just ask the AI.” (P8M)

The data also shows that 7 students would ask for an overview of the reading material from the GenAI

chatbot. Student P4D explained that they do so to receive an overview of the content, while student P4E used it to better understand the material that they have just read briefly beforehand.

“... So, I use ChatGPT to get a general idea of what the book is about. Basically, it's like giving an overview of the book.” (P4D)

“Of course when we, for me specifically, there will always be some part that I do not understand. What does this mean, like that. So, then I would ask ChatGPT.” (P4E)

In doing so, 4 students would send the reading materials to the chatbot, some in the form of PDFs and links (P4D), while others (P6B) by simply typing in its meta data (i.e., the title, author, and publisher), as stated in the following.

“I usually send the book directly, whether in PDF format or when it is a website, in the form of a link.” (P4D)

“... I send the book directly, if possible. If it is not possible, I would send information like the title, publisher, and author of the book ...” (P6B)

After receiving the AI-generated overview of the reading material, 3 students were also found to cross-check the accuracy of the content. One of the students (P4E) shared that they would then “have a discussion session” with the chatbot. Moreover, students P4E and P8C shared that they would ask the chatbot to “mention the page number” to where the information was retrieved, later using it to cross-check the AI-generated overview with the source material. Student P6B further explained

that they would then read the material “in a more detailed manner”.

From the findings above, it was revealed that students’ implementation of the overviewing and skimming strategy through GenAI chatbots remains to be done by themselves. This is apparent as most of them would skim over the reading materials themselves, asking the GenAI chatbots for an overview afterwards just so they could understand the content better. Furthermore, several students were found to cross-check the information stated in the AI-generated overview with the source material, showing their willingness to engage with the reading materials and caution while utilizing the GenAI chatbots.

b. Generative AI Chatbot-Mediated Implementation of the Determining Meaning Strategy

The second most frequently requested assistance that students asked from the GenAI chatbot was in implementing the determining meaning strategy, which was mentioned by 25 students. The GenAI chatbots used to enact this strategy were ChatGPT (20 students), Gemini (4 students), and Meta AI (1 students). Through the interview, it was revealed that students carried out the strategy by asking the chatbot for translation and later checking the relevance of the translation results with the overall content of the reading material. The details of their request and action taken are as follows.

When trying to determine the meaning of words or sentences, 7 students reportedly rely on the GenAI chatbot to provide them with a contextually relevant meaning. As explained by student P4D, the chatbot does not simply translate the words for them, but also ensures that the meaning is “connected” to the context or topic they were mentioned in. However, it was also noted that

some students (P2E and P6B) used the GenAI chatbot to translate sentences and paragraphs only, preferring to use other tools (i.e., dictionary, Google Translate, and DeepL) to translate the meaning of a word.

“So, when I use Google Translate or a dictionary, it is usually to look up words that I don't know the meaning of. Gemini is used to find the meaning, so it's wholly, to capture the meaning from the whole sentence or paragraph.” (P2E)

“... If I'm looking for the meaning of a word I don't know, I would use an AI app called DeepL to translate it... ChatGPT is for sentences, but if it's just a single word, then I use DeepL.” (P6B)

In doing so, 3 students reported sending the referred sentence or paragraph to the chatbot. Some students would type it in (P2C), while others copy and paste it (P4D), or simply upload a screenshot of a section from the reading material (P2C).

“As for that, I would just copy and paste part of it, not a whole book. So it would just be the referred sentence or paragraph.” (P4D)

“... Sometimes it's in the form of a screenshot, sometimes I type in the sentences manually.” (P2C)

After receiving the AI-generated translation of the reading material, 1 student, P8C, shared that they would check the relevance and accuracy of the translation results with the overall content of the reading material.

“Of course. After I asked ChatGPT and got the translation, I'll definitely read it again and see if

it makes sense. Sometimes they're not always right, right?" (P8C)

From the findings above, it was noted that students' implementation of the determining meaning strategy through GenAI chatbots was enacted in the form of asking for translation. Students would use the chatbot to translate some sentences and sections for them rather than guessing their meaning themselves, either through context clues or the overall idea of the topic. However, for some students, the practice was still followed by them checking whether the AI-generated translation is relevant and accurate to the referred section or words, showcasing a level of caution while relying on the GenAI chatbot's assistance.

c. Generative AI Chatbot-Mediated Implementation of the Inferring Strategy

Students were also known to use GenAI chatbots to infer implicit meaning from words and sentences within the reading material, with it being mentioned by 24 students. The GenAI chatbots students used were ChatGPT, reported by 21 students, and Gemini, reported by 3 students. From the interview with one of the students, it was noted that they would carry out the strategy by asking the chatbot for an explanation upon struggling to understand the meaning being implied within a specific section of the reading material. The details of their request and action taken are as follows.

Through the interview, student P2E shared that they would ask the GenAI chatbot to help make inferences when they are struggling to grasp the implicit meaning of a text. Although it was implied that they first tried to infer the meaning of a text on their own. Having only understood "some bits" of it, student P2E resorted to

asking the GenAI chatbot to complete their half-formed understanding.

“Because I was having trouble understanding what I was reading, the language was in English. I didn't understand the implied or explicit meaning of the text. So I used AI to help explain it, even though I already understood some bits of it.” (P2E)

From the findings above, it was found that students' implementation of the inferring strategy remains to be done by themselves. This could be seen through their attempt to infer the implicit meaning of the text before finally using the GenAI chatbot just so that they could understand it as a whole.

d. Generative AI Chatbot-Mediated Implementation of the Evaluating-Reflecting Strategy

The survey result also showed that students have involved GenAI chatbots in trying to evaluate and reflect on the content of the reading material, which was mentioned by 14 students. There were two GenAI chatbots that students used to enact this strategy, which were ChatGPT (11 students) and Gemini (3 students). Additionally, from the interview, the chatbot was found to assist only in reflecting. Having said that, the reflection was done in two different ways: to give opinions regarding students' reflection results and to be used as the basis of their reflection. The details of their request and action taken are as follows.

First, there was only 1 student found to have asked the GenAI chatbot to give opinions about their reflection results as a form of reassurance. The attempt to reflect was showcased by P8M trying to create an example based on their personal experience related to the topic

they are reading. However, upon feeling “unsure” of its relevancy, the student decided to ask the GenAI for an opinion to help confirm it.

“Oh, once, I tried to create my own example. So, for example, it is based on personal experience that is related to a theory ... But sometimes in making it, I am unsure, so I try to ask the AI whether the example that I made actually relates to the theory I'm reading ...” (P8M)

Second, 1 student has also tried to reflect on the material through the explanation given by the GenAI chatbot. Although mentioned briefly, P6B shared that they had once compared the generated AI response with their personal experience. This, in turn, positions the information that was rephrased by the chatbot as the basis of the student’s reflection regarding the content of the reading material.

“... I have also compared ChatGPT's answers with my own experiences.” (P6B)

From the findings above, it was found that students’ implementation of the reflecting strategy through GenAI chatbots was carried out in two ways: to reflect directly from the reading material or to reflect based on the information given by the chatbot. In relation to the former, students would ask the chatbot as a means to reassure themselves, whether their reflection on the content of the reading material is accurate or not. As for the latter, some students instead used the response given by the GenAI chatbot as the basis of their reflection.

e. Generative AI Chatbot-Mediated Implementation of the Activating Prior Knowledge

Based on the initial survey result, students were also found to be using GenAI chatbots to carry out the activating prior knowledge strategy, being mentioned by 12 students, 11 students using ChatGPT while 1 student using Gemini. However, the data gathered from the interview instead showcased its use as a partner to brainstorm ideas together rather than to help predict or hypothesize about the content of the reading material. The details of their request and action taken are as follows.

In the implementation of the activating prior knowledge strategy, only 1 student (P6B) was found to be using GenAI to brainstorm ideas together. Through the interview, it was noted that the chatbot was positioned as a conversation partner. In relation to their course assignment, students P6B have asked the GenAI chatbot for topic recommendations. From this exchange, they were able to decide on a topic to cover, indirectly determining the reading material they will be reading afterwards.

"I decided on the topic myself. But first, I would ask ChatGPT for help, asking for recommendations. So, I would brainstorm about the things I will be discussing. ... Just to make things easier and save time. The topic idea only came up after chatting with ChatGPT." (P6B)

From the findings above, it was revealed that students' implementation of the activating prior knowledge strategy through the GenAI chatbot was enacted in the form of having a conversation with the chatbot. While brainstorming about a topic together, students have indirectly relied on not just their prior

knowledge but on the GenAI chatbot's database as well. Additionally, it should be noted that the practice was done without the reading material ever being present, given that the brainstorming was centered loosely around a topic rather than based on a specific source material.

f. Generative AI Chatbot-Mediated Implementation of the Making Notes Strategy

Based on the survey result, the making notes strategy was found to be the least frequently implemented reading comprehension strategy through GenAI chatbot-mediated reading, with it being mentioned only by 11 students. The GenAI chatbots used were ChatGPT, reported by 8 students and Gemini, reported by 3 students. When trying to take notes of important information within the reading material, the data from the interview shows that students would ask the chatbot to present a summary of its content in a concise manner or in a visualized format. Afterwards, students would save the AI-generated summary in their own personal notes. The details of their request and action taken are as follows.

From the data gathered, 4 students were found to have asked the GenAI chatbot to summarize important information within the text and present it in several forms. Student P6B explained that they had once requested the chatbot to present the summary in all kinds of formats, either as a list, a diagram, or even a table. Another student (P8M) also added that they would ask the summary to be given in another form only when it is still deemed unclear. In doing so, the students would either upload or mention the reading material that they want to take notes from to the GenAI chatbot.

“... Request a summary in the form of a list, diagram, table, I've done it all ... I uploaded the book, if not I would write down the title and author of the book for the AI.” (P6B)

“It depends. If (information in) the table is clear, then I will just use a table. If not, I will ask for a summary in the form of a list and a short paragraph ... ” (P8M)

Furthermore, 4 students were also found to make their notes based on the information that was highlighted by the GenAI chatbot. In regards to the note-taking itself, one of the students (P8C) explained that they would read the important information pointed out by the GenAI chatbot before checking and highlighting the said information directly within the file of the reading material.

“I usually double-check, I will read it again ... I also have my own notes ... So, I will write down what ChatGPT says on the page... I usually highlight the book file too ... So I can double-check directly within the book.” (P8C)

Meanwhile, 3 students have opted to take notes in a separate place, such as their binder (P6G), Google Docs (P8M), and even WhatsApp (P4E). In practice, some students would also check the information being presented in an AI-generated summary before copying it to their personal notes (P8M) or rephrasing the AI wordings as they made their notes (P6G).

“Because I have a binder, I usually take notes, jot down the points, and then it depends on this too, time. If I still have time, I will make a note, write down the points, or maybe I typed them, or rephrase the language.” (P6G)

“... Then I will copy it into GoogleDocs... also cross-checking it, so it is not just copy and pasting it.” (P8M)

“... I usually save the answers in my WhatsApp chat, on my own number. So I don't have to go back and forth to the AI ... I learn through there ... I'll create new sentences there ...” (P4E)

From the findings above, it was revealed that students' implementation of the making notes strategy through GenAI chatbots was carried out in the form of asking the chatbot for a summary of the reading material, either in the form of a text (i.e., a list and short paragraph) or a visualization (i.e., a table or diagram). In regard to the note-taking itself, some students simply highlighted the information directly within the reading material, some copied and pasted the AI-generated summary into their personal notes, while others rephrased the wording as they transferred it.

Drawing from all of the findings above, it was found that the four GenAI chatbots EFL undergraduate students reported using in their academic reading were used to implement different reading comprehension strategies. ChatGPT was mainly used to assist in the implementation of the overviewing-skimming and the inferring strategies. Gemini, on the other hand, was used to help implement the overviewing-skimming as well as the determining meaning strategies. For Perplexity AI the Gen AI chatbot was used to implement the overviewing-skimming strategy. Meanwhile, Meta AI was used to assist with the implementation of determining strategy. In relation to the practical application, the use of GenAI chatbots has resulted in the alteration of how the strategies were traditionally enacted. This change

was especially apparent during the implementation of the determining meaning, activating prior knowledge, and making notes strategies. Within the practice, the GenAI enacts the strategies for them by providing a translation, summary, or additional information. However, there were also reading comprehension strategies that remained to be carried out by the students themselves, including: overviewing-skimming, inferring, and reflecting strategies. In these instances, the extent of the GenAI chatbot's help was simply to provide students with reassurance, explanation, and opinions regarding their understanding of the academic reading materials. Meanwhile, in relation to students' response towards the GenAI chatbot's assistance, some were found to read and cross-check the AI-generated information with the source material, engage in a discussion with the GenAI chatbot, while others saved the AI-generated information into their own personal notes.

4.2 Discussion

The following section is designated to discuss the previously found findings together with the existing studies and theories reviewed in the chapters before. Separated into two sections, the first will discuss the GenAI chatbots that EFL undergraduate students use to facilitate their English reading comprehension, while the second will discuss students' implementation of reading comprehension strategies through GenAI chatbot-mediated reading.

4.2.1 Generative AI Chatbot Students Used to Facilitate Reading Comprehension

The findings of the first research question reveals the GenAI chatbots that EFL undergraduate students used while reading, along with their reasons in relation to facilitating their English reading comprehension. Amongst the reported four GenAI chatbots, ChatGPT was preferred the most,

followed by Gemini, Perplexity AI, and Meta AI. These preferences were derived from students' need for easier and quicker reading, the lecturer's recommendation, as well as the GenAI chatbots' flexibility, familiarity, practicality, and clear source attribution. For ChatGPT in particular, students mainly used them for easier reading. Gemini on the other hand was used mainly due to its flexibility. Meanwhile, Perplexity AI and Meta AI were used based on the idea of practicality. However, unique to ChatGPT, students have also highlighted its familiarity and personalization settings. Gemini was also found distinct in its integration of other Google applications, practice of clear source attribution, and being the only chatbot that was recommended by the lecturer. All of the found findings are discussed below, together with related existing studies, and interpreted following the previously established theoretical framework.

In facilitating their English reading comprehension, there were four GenAI chatbots that EFL undergraduate students reported to be using, including ChatGPT, Gemini, Perplexity AI, and Meta AI. The utilization of these GenAI chatbots for reading is also found in the following previous studies. The study conducted by Muman (2025) revealed the use of ChatGPT by EFL students, improving both their reading comprehension and engagement. The use of Gemini was also found in Patty and Lekatompessy's (2025) study, where it was noted to be most useful in supporting EFL students' reading skills. Although there were no previous studies that directly showed the use of Perplexity AI for reading, the GenAI chatbot was still known to be utilized for its capability to provide EFL students with easy-to-understand summaries of English reading materials (Hatmanto et al., 2026). As for Meta AI, Susilowati, Zainuddin, and Islam's (2025) study has highlighted its usefulness also in supporting EFL students' reading comprehension in reading English reading materials. Based

on these results, it can be said that all of the four GenAI chatbots have the potential and have been used for reading before, noting them useful in facilitating EFL undergraduate students' English reading comprehension (Aldreabi et al., 2025). Meanwhile, the discussion regarding their reasons for using GenAI chatbots in reading is expanded further below.

Among all of the reported reasons, the most commonly mentioned by the EFL undergraduate students was using GenAI chatbots due to their need for easier reading. This was in response to them experiencing reading difficulties, feeling uncertain, and feeling burned out. First, EFL undergraduate students were found using a GenAI chatbot due to struggling to read difficult and lengthy English academic materials. Hedlin, Estling, Wong, Demmans, and Vibreg's (2025) study supported this finding, where ChatGPT was found to help address EFL students' difficulties in understanding complex English academic materials by enhancing the readability of the text. Besides reading difficulties, EFL undergraduate students also reported using the chatbot because of their want for reassurance. Having read the English academic material by themselves beforehand, students felt unsure of their own comprehension. This result aligns with Muman's (2025) finding, revealing that overall EFL students became more confident with their understanding of the English reading material after engaging with the GenAI chatbot. Considering the emphasis on the struggle and challenge surrounding comprehension, these findings suggest that the GenAI chatbots were used partly to make reading more accessible for the EFL students. Hence, these findings add to the idea that GenAI chatbots have made learning more accessible, which is in parallel with Holmes, Bialik, and Fadel's (2019) thought about the role of AI.

In addition, EFL undergraduate students' use of GenAI chatbots was also due to their want to make the reading process quicker. The finding was found similar to Tahir and Jahrir's (2025) study, in which the EFL students used the GenAI chatbot in the interest of saving time in reading while also prioritizing the completion of their task rather than the reading process itself. The same study has also supported the idea of using GenAI chatbots when feeling burned out, noting that the GenAI chatbot enables the EFL undergraduate students to finish their assignments without having the need to read their academic material in depth (Tahir & Jahrir, 2025). Taken together, it can be argued that Gen AI chatbots were used partly to make the process of reading brief and less demanding so that EFL students could spend more time and energy completing their assignments instead. The GenAI chatbots have indirectly enabled the EFL undergraduate students to still finish their coursework despite spending so little time learning and engaging with the academic reading material (Montebello, 2026). These findings help to provide a clearer understanding of why unconstructive use of GenAI chatbots happens.

In making use of the GenAI chatbots' flexibility, EFL undergraduate students have also emphasized their flexible access, language personalization, personalization settings, and integration of other applications. In their reason about flexible access, the students have underscored the fact that the Gen AI chatbots allow them to gain reading assistance without having to worry about time and space. This result is supported by Dzimar, Maulida, Jannah, and Rahma's (2026) study, finding that the EFL students viewed the GenAI chatbots as an always available learning companion. Another study supporting this finding was carried out by Tan, Hien, and Phuong's (2025), in which EFL undergraduate students are able to provide themselves with immediate reading assistance using GenAI, no longer

waiting for a turn just to receive help from their lecturer. In this sense, EFL undergraduate students' use of GenAI chatbots were in part driven by their circumstance, which was trying to make use of an available technology in order to fulfill their need for immediate reading support (Gani & Ismahan, (2025). Thus, this result also reinforced Holmes, Bialik, and Fadel's (2019) idea of AI use in education, with the tool serving to make learning more accessible through its real-time services.

Students have also pointed out the GenAI chatbots' capability of adjusting or personalizing their language to match that of the users. In relation to language complexity, this finding was echoed in Yen's (2024) study, noting that ChatGPT as a GenAI chatbot is capable of rephrasing complex sentences into something that is more appropriate to each of the students' language levels while also preserving the original idea of the text. Therefore, it can be inferred that the use of GenAI chatbots by EFL undergraduate students was partially due to their valuable capability of providing personalized and in-tune learning assistance (Kafabih et al., 2026). These findings contribute to the existing evidence about GenAI chatbots' value and potential in supporting EFL students during their self-study, notably in their academic reading.

Specifically for ChatGPT, although the GenAI chatbot was also highlighted for its personalization settings, the feature was mentioned only two times. This infrequent use of the personalization setting suggests that the EFL undergraduate students were already satisfied with the reading assistance ChatGPT provided in its default setting. On the other hand, it can also be argued that students have yet to use the GenAI chatbot's personalization feature to the fullest. These interpretations were supported by Vorobyeva, Belous, Savchenko, Smirnova, Nikitina, and Zhadanov's (2025) finding, which revealed that although such a feature

exists, its use for learning was rarely mentioned and remains underused. Hence, this finding adds to the existing idea that EFL students still need further guidance in their utilization of AI to support their learning activities.

As for Gemini, the reported flexibility also includes the integration of other Google applications as part of its features, which was implied to also be used by the EFL students while reading their English academic materials. When considering the context, it is perhaps related to their goal for reading, which was to complete their assignments. Surrounding the app integration, a previous study conducted by Fitria (2025) claimed that it allows Gemini to provide EFL students with a broader range of assistance compared to the other GenAI chatbots. Ultimately, it can be inferred that the EFL students have found the integration of other Google applications to be useful in supporting their English reading comprehension as well as in completing their tasks. Thus, this finding reinforced Stanley's (2013) notion about technology in language learning, in which it should be utilized to serve the pedagogical goal.

Another reason attributed to ChatGPT only was regarding its familiarity within the education community. Several EFL undergraduate students have highlighted ChatGPT as one of the first GenAI chatbots that they knew and ever used. This finding is supported by a study which claimed ChatGPT as the most popular GenAI chatbot to be used by those in higher education (Ravšelj et al., 2025). From these results, it can be argued that ChatGPT's popularity is part of the reason as to why it became the most preferred to use GenAI chatbot by the EFL undergraduate students. This finding supports the general idea of how the sudden rise of ChatGPT has caused a paradigm shift in higher education, resulting in the change in students' learning practices (Boudia & Bengueddach, 2024). Therefore, it can be said that this research shows how EFL

students' use of GenAI chatbot in their reading can simply be due to exposure.

Gemini was also highlighted for its practice of clearly attributing the source of its responses. EFL undergraduate students have reasoned that their use of Gemini over the other GenAI chatbots was due to its clear source attribution. However, it was also noted that students were aware of the GenAI chatbot's possible inaccuracy even with the source being clearly linked or referenced. This finding is aligned with Fitria's (2025) earlier study, noting that Gemini may sometimes include a specific reference to its responses upon the user's request or when the context is deemed necessary. Moreover, the study also supports the finding that students acknowledge the importance and need to check the information provided by Gemini through other means. Thus, it can be argued that EFL undergraduate students have practiced some level of caution in their use of the tool, making use of their awareness to counteract the bivalent nature of GenAIs (Kurniawaty, 2025). This finding contributes by providing a deeper understanding of the consideration that EFL undergraduate students make while asking for reading assistance from a machine such as GenAI chatbots.

Meanwhile, both the use of Perplexity and Meta AI by EFL undergraduate students was attributed to the idea of practicality. The two GenAI chatbots were noted as easy to reach and simple to utilize, given that they can just be accessed through the WhatsApp messaging app. This result aligns with the previous study done by Aldreabi, Dahdoul, Alhur, Alzboun, and Alsalhi (2025), revealing that students are more drawn towards GenAI chatbots that they deem as user-friendly or straightforward to navigate. Given the result, it can be inferred that EFL undergraduate students' reason for using a GenAI chatbot was not only limited to its usefulness in reading, but also based on its accessibility and

practical utility. Therefore, this finding should be taken into account when EFL students are seen frequently using them, as such convenience may potentially undermine the pedagogical goal instead.

Another noteworthy finding to discuss was regarding an EFL undergraduate student's preference for utilizing Gemini because of the recommendation of their lecturer. Although it was not explained why Gemini in particular, the student did express feeling more comfortable using it due to the fact that their lecturer was the one who recommended the GenAI chatbot to them. Furthermore, the said lecturer had also given the student some advice on how to use the tool effectively. This result aligns with Ma'rifah, Masrifah, and Arifani's (2021) finding, noting that EFL students' decision to use a technology can be influenced by their teacher's pedagogical beliefs and classroom practices. Hence, this finding suggests that EFL undergraduate students may benefit from the guidance and modelling given by those who are more knowledgeable (Badger et al., 2026). Furthermore, the found result comes back down to the importance of pedagogical support in the utilization of AI in learning, adding to the existing studies before.

To conclude, the GenAI chatbots EFL undergraduate students used to facilitate their reading comprehension includes ChatGPT, Gemini, Perplexity AI and Meta AI. The utilization of these four GenAI chatbots in academic reading are aligned with existing previous studies. EFL students' preference over ChatGPT and Gemini due to its capabilities in making reading easier, and flexibility underscores the idea that GenAI chatbots have made the reading material and reading assistance more accessible. Meanwhile, the use of Perplexity AI and Meta AI due to its practicality, as well as ChatGPT and Gemini for quicker reading highlights the risk of students' over-relying on the tools during reading. Additionally, ChatGPT's familiarity and the lecturer's

recommendation of Gemini can be said as factors that influenced students' use of the GenAI chatbots in their academic reading. The underutilization of ChatGPT's personalization setting was also interpreted as students still requiring further guidance. In addition, the use of Gemini for its clear source attribution and app integration indicates a level of caution and awareness that students show while using GenAI chatbots in their academic reading. Therefore, this qualitative case study contributes by adding the four GenAI chatbot's value as a reading assistance and the idea that EFL undergraduate students still need to be guided within their AI use.

4.2.2 Students' Implementation of Reading Comprehension Strategies through GenAI Chatbot-Mediated Reading

The findings of the second research question consisted of the reading comprehension strategies that were carried out through GenAI chatbot-mediated reading, serving as the EFL undergraduate students' purpose for using, along with the extent of the use and their response afterwards to the chatbot's given assistance. The data revealed that the four GenAI chatbots EFL undergraduate students reported using in their academic reading were used to implement different reading comprehension strategies. ChatGPT was mainly used to assist in the implementation of the overviewskimming and the inferring strategies. Gemini, on the other hand, was used to help implement the overviewskimming and the determining meaning strategies. For Perplexity AI the Gen AI chatbot was used to implement the overviewskimming strategy. Meanwhile, Meta AI was used to assist with the implementation of determining strategy. As for the extent of their use, the use of GenAI chatbots has resulted in the alteration of how the strategies were traditionally enacted. This change was especially apparent during the implementation of the determining

meaning, activating prior knowledge, and making notes strategies. Within the practice, the GenAI enacts the strategies for them by providing a translation, summary, or additional information. However, there were also reading comprehension strategies that remained to be carried out by the students themselves, including: overviewing-skimming, inferring, and reflecting strategies. In these instances, the extent of the GenAI chatbot's help was simply to provide students with reassurance, explanation, and opinions regarding their understanding of the academic reading materials. Furthermore, in relation to EFL undergraduate students' response towards the GenAI chatbot's assistance, it varies from just reading to cross-checking the AI generated information with the source material, saving the AI generated information into their own personal notes, and engaging in a discussion with the GenAI chatbot. All of the findings above are discussed in the following section, related to similar previous studies, and interpreted in accordance with the theoretical framework established in the chapters before.

EFL undergraduate students' purpose for using the four GenAI chatbots reported before was found to be similar between one chatbot to the other. For ChatGPT, Gemini, and Perplexity AI, students have used them mainly to assist in implementing the overviewing-skimming strategy. The finding for ChatGPT was supported by Giray, Jacob, and Gumalin's (2024) study, where it highlights ChatGPT's strength in generating reliable overviews, making it a useful tool when trying to grasp the general idea of academic reading materials. As for Gemini, its purpose for use was found aligned with Pande, Patil, Mukkemwar, Panchal, and Bhoite's (2024) finding, revealing that it is well adapted to carry out tasks that involve complex context, such as analysing and generating an overview from a document. However, the finding for Perplexity AI differs from what

was found in Rajamani and Rajaseela's (2025) study, showing that the tool is more well-suited for tasks that involve fact-checking and web search rather than reviewing one specific document.

Meta AI and for Gemini also, both were mainly used by EFL undergraduate students to help in implementing the determining meaning strategy. The finding for Meta AI was corroborated by Susilowati, Zainuddin, and Islam's (2025) finding, noting that the GenAI chatbot is capable of providing students with vocabulary explanations and translation when encountering difficult texts. Meanwhile, Gemini's finding was supported by Pande, Patil, Mukkemwar, Panchal, and Bhoite's (2024) study, highlighting its capability of recognising and assigning the meaning of a text that is appropriate to the context it was used in.

In addition to ChatGPT, the GenAI chatbot was also equally used to assist in enacting the inferring reading comprehension strategy. However, this result was found to contradict the finding in Farrokhnia, Banihashem, Noroozi, and Wals's (2024) study, which claimed that although ChatGPT is able to recognise patterns and generate plausible responses, the GenAI chatbot tends to underperform in tasks that require a sensitive or nuanced understanding.

Based on the findings above and the EFL undergraduate students' reasons that were discussed in the section before, it can be said that the GenAI chatbots students used were not always suitable to carry out the reading comprehension strategies they intended to implement. Even so, perhaps for the sake of simplicity and convenience, some EFL undergraduate students choose to just implement several strategies using one GenAI chatbot. However, it can also be argued that perhaps some were also not aware of the differences in strength and weakness that

each GenAI chatbot holds (Rismanchian et al., 2026). Therefore, EFL undergraduate students should take the findings above into consideration when wanting to enact a specific reading comprehension strategy or while choosing which GenAI chatbot to use in order to minimize the tool's drawbacks. Furthermore, the discussion surrounding the extent of GenAI chatbot use by EFL undergraduate students within the implementation of the reading comprehension strategies is expanded below.

In the implementation of some reading comprehension strategies, some were found to be mainly enacted by the Gen AI chatbot rather than the EFL undergraduate students. The referred strategies are: determining meaning, activating prior knowledge, and making notes. First, in the practice of determining strategy, students would ask the GenAI chatbot to give them contextually relevant translations of some sentences or sections within the reading material. In doing so, the referred sentences or sections are given in the form of a text or a screenshot. It was also noted that the EFL undergraduate students mostly used the GenAI chatbots to translate sentences or paragraphs rather than words. This use of the GenAI chatbot was also found in a study conducted by Hidayati and Nihayah (2024), where EFL students have used the tool to provide themselves with a contextually relevant translation of the sentences they wish to understand. When related back to Pressley and Afflerbach's (1995) concept of the determining meaning strategy, it becomes apparent that the EFL students no longer need to make guesses about the words or sentences they are trying to understand. However, considering their reasons before, the practice of asking for translation seemed to once again have stemmed from the EFL undergraduate students' want for speed and accuracy (Dinh, 2025). However, it should also be considered the possibility of EFL undergraduate students abusing the GenAI chatbots to

translate a hefty amount of texts and doing it far too frequently, given that such practice may instead reduce the learning outcome (Mohale & Suliman, 2025). This finding contributes to the importance of establishing a strong conviction of using GenAI chatbots constructively and meaningfully in order to maximize their pedagogical impact.

As for the implementation of the activating prior knowledge strategy, EFL undergraduate students were found to have asked the GenAI chatbot to brainstorm about a topic together. This was done without a reading material being present, only involving the student's prior knowledge and the GenAI chatbot's database surrounding the said topic. This use of the GenAI chatbot is similar to Herdawan, Sari, and Setyoningrum's (2026) study, where the GenAI chatbot supported EFL students' reading comprehension by acting as their discussion partner. In relation to Pressley and Afflerbach's (1995) concept of the activating prior knowledge strategy, it can be said that the practice now involves not only the students' but also the GenAI chatbot's "knowledge" as well. Moreover, without a reading material to reference, the students may instead have connected their prior knowledge with the information introduced by the GenAI chatbot. However, this practice can be risky to do given the hallucinative and potentially biased nature of GenAI chatbots (Davar et al., 2025). Therefore, the finding adds to the existing idea that EFL students should first learn about the potential and drawbacks of the GenAI chatbot itself before utilizing it in their learning.

In the practice of making notes strategy, students would ask the GenAI chatbot to summarize the academic reading material for them to make notes from. The summary itself is presented in accordance with their preferred format, some in the form of visualization (i.e., diagram or tables) while others remain as texts (bullet points or short

paragraphs). In doing so, the referred chapter or reading material is inputted to the GenAI chatbot. This practice of using the chatbot is supported by Huang, Hwang J., Chen, and Hwang H.'s (2026) study, in which the AI-generated summary, both text-based and graphical-based, improved students' memory and comprehension of the reading material. When connected back to Pressley and Afflerbach's (1995) concept of the making notes strategy, the practice of summarizing and visualizing became the GenAI chatbot to enact. Hence, it can be said that the chatbot enables EFL undergraduate students to make note of important information without having to actually read the reading material themselves first (Montebello, 2026). This finding also contributes by adding to the existing evidence on how unconstructive use of GenAI chatbots can happen.

Meanwhile, the reading comprehension strategies that remain to be implemented by the EFL undergraduate students themselves include: the overviewing-skimming, inferring, and reflecting strategies. First, in the practice of the overview-skimming strategy, the students would briefly skim over the reading material first before asking the GenAI chatbot for an overview. The purpose of this request was so they could better understand the material, especially about the sections that they perceived as difficult. In doing so, the students would send the referred material to the GenAI chatbot in the form of PDFs, its metadata, or a link if it is a website. This use of the GenAI chatbot was corroborated by Ashour's (2025) study, highlighting its potential usefulness in providing a quick content overview of academic reading materials that is concise and easy to read. Given the result, the finding suggests that this particular use of the GenAI chatbot was done in a way that enhances EFL students' capability rather than outright replacing them, which is in accordance with Marr's (2024) notion regarding GenAI. Ultimately, this finding adds Russell and Norvig's (2016)

idea of GenAI chatbots as a technology that serves to advance and improve EFL undergraduate students' overall learning practices, along with their responsibility for using it constructively.

Second, in the implementation of the inferring strategy, EFL undergraduate students were found trying to infer the meaning of the text they are reading on their own before asking the GenAI chatbot to explain it to them. The reason behind this request was so they could finally understand the implied meaning as a whole. This use of the GenAI chatbot is aligned with Pondeliková and Luprichová's (2024) study, showing that the GenAI chatbot can facilitate students' reading comprehension by helping them understand both the implicit and explicit meaning of texts through explanation. However, as noted before, some GenAI chatbots were known to be less capable in completing tasks that require nuanced understanding (Farrokhnia et al., 2024). Hence, it can be argued that while implementing the inferring strategy through GenAI chatbot-mediated reading, EFL students should remain critical of the explanation it generates. This finding contributes by providing a deeper understanding of the considerations that EFL undergraduate students should make when asking for reading assistance from a machine such as GenAI chatbots.

Third, in the practice of implementing the reflecting strategy through GenAI chatbot-mediated reading, the EFL students were found trying to reflect on the content of the reading material on their own, before finally asking the GenAI to give feedback on their reflection results. In doing so, the students would make a reflection by making an example or comparing it to their personal experience. This practice of using the chatbot is aligned with Ironsi and Bostanci's (2026) study, in which students who received feedback regarding their understanding of the reading material were found to have a higher comprehension result.

In relation to Snow's (2002) elements of reading comprehension, it can be interpreted that EFL undergraduate students' request for feedback was their attempt as a reader in trying to monitor their own understanding. Hence, this finding also adds to the notion that GenAI chatbots as a tool were meant to improve students' learning practices, as well as be used responsibly and constructively (Russell & Norvig, 2016). Additionally, the discussion surrounding EFL undergraduate students' response towards the GenAI chatbots given reading assistance is presented in the following.

EFL undergraduate students have responded to the reading assistance given by the GenAI chatbots in several ways: cross-checking AI-generated information with the source material, saving the AI-generated information into their own personal notes, and engaging in a discussion with the GenAI chatbot. First, upon receiving the AI-generated overview, students would cross-check the information that was being presented with the source material. In doing so, they would ask for the GenAI chatbot to mention the page numbers from which it was retrieved and then carefully read the said page. This practice of cross-checking was supported by Patty and Lekatompessy's (2025) study, revealing that EFL students have practiced cross-checking and critically evaluating the AI-generated content they receive instead of blindly trusting the GenAI chatbot. From this finding, it can be argued that even if students did not receive explicit training on AI use, they have grown aware of the GenAI chatbots' drawbacks through their everyday experiences in using them (Xiao & Zhi, 2023). Therefore, this finding adds to the idea of EFL undergraduate students being more cautious in their GenAI chatbot use while simultaneously showcasing their want for accurate comprehension of the reading material.

Second, EFL undergraduate students were also known to save the GenAI chatbots' AI-generated summaries into their own personal notes. In doing so, some students have preferred to simply copy it while others try to rephrase it using their own words or highlight the pointed out information directly within the source material. Although there was no study that specifically shows students ever having to save the GenAI chatbots' response, a similar practice was found in Li's (2025) study, where students copied parts of the original text from the source material and paraphrased it as they were making the notes. Thus, it can be argued that students may potentially do the same with the AI-generated summary, given that one of their reasons for using the GenAI chatbot was to make lengthy and difficult reading material easier to understand. This finding contributes by showing the possibility of EFL undergraduate students using or even relying on the GenAI chatbot to generate an AI summary of their reading material for them to learn from.

Third, some EFL undergraduate students have also chosen to engage further in a discussion with the GenAI chatbots. After receiving and reading the AI-generated overview, students would discuss the information that is being presented. This discussion practice with the GenAI chatbot is corroborated by Sagita, M., Sagita E., and Syafari's (2025) finding, noting that the chatbot is able to support EFL students' reading comprehension through its communication-based services and by giving a summary of the reading material. Given the finding, it can be argued that EFL students have found the GenAI chatbot's conversational interface, as well as capability of providing dynamic and real-time assistance to be useful in facilitating their reading comprehension. In turn, this interactiveness becomes the highlight of the tool's value (Putri & Jaya, 2026). Thus, the result contributes by adding to the existing

evidence regarding how GenAI chatbots can serve as a useful reading assistance in circumstances where human human assistance is scarce or unavailable.

To summarize, the reported four GenAI chatbots, ChatGPT, Gemini, Perplexity AI, and Meta AI were mainly used to help implement different reading comprehension strategies. For ChatGPT, students often used it to enact the overviewing-skimming and inferring strategies. Gemini was instead commonly used to implement the overviewing-skimming and determining meaning strategies. Meanwhile, Perplexity AI was frequently used to assist with the implementation of the overviewing-skimming strategy. Meta AI, on the other hand, was often used to enact the determining meaning strategy. However, some of these utilizations were found to contradict with the GenAI chatbot's strengths, indicating that students were perhaps not aware of the different capabilities that each GenAI chatbot holds or simply favored convenience. In relation to the implementations themselves, the determining meaning, activating prior knowledge, and making notes strategies were mainly enacted by the GenAI chatbots. The alteration of these practices were interpreted as students prioritizing task completion and accuracy over the learning or reading process. In contrast, the overviewing-skimming, inferring, and reflecting strategies were still enacted by the students themselves, using the GenAI chatbots only to gain a better comprehension of the reading material. Meanwhile, in regard to students' response to the assistance given by the GenAI chatbots, students practice of cross-checking and saving the AI-generated information, as well as engaging further in a discussion with the chatbot were seen as them showcasing caution and making use of the GenAI chatbots' valuable dynamic interactive feature. Hence, this qualitative case study contributes by adding to the importance of

creating regulations surrounding AI use for academic reading or learning in general.



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CHAPTER V

CONCLUSION AND SUGGESTION

The fifth chapter is meant to provide a summary of the findings and implications of this research, as well as voice some suggestions and thoughts for those who might benefit, including students, teachers, and future researchers.

5.1 Conclusion

As has been shown in the chapter before, the researcher summarizes the findings and discussions of this case study into three separate sections following the focus of each research question and implications of the findings. The first paragraph is a summary of the GenAI chatbots that EFL undergraduate students use to facilitate their English reading comprehension, the second paragraph is a summary of the implementation of reading comprehension strategies by EFL undergraduate students through GenAI chatbot-mediated reading, while the third is a summary of this research's implication and contribution.

In answering the first research question, which is “What generative AI chatbots do EFL undergraduate students use to facilitate their reading comprehension?”, the researcher concluded that there are four GenAI chatbots that EFL undergraduate students have reported using in their academic reading. ChatGPT was used by students mainly for easier reading. Gemini on the other hand was used mainly due to its flexibility. Meanwhile, Perplexity AI and Meta AI were used based on the idea of practicality. However, unique to ChatGPT, students have also underscored its familiarity and personalization settings. As for Gemini, it was distinct in regards to its integration of other Google applications, clear source attribution, and as the GenAI chatbot that was recommended to use by a lecturer. Thus, the GenAI chatbots that EFL undergraduate students prefer to use in their academic reading are those that have the capabilities in helping students read more easily, flexible, and practical.

Meanwhile, in answering the second research question, which is “How do EFL undergraduate students implement reading comprehension strategies through generative AI chatbot-mediated reading?”, the researcher concluded that the four GenAI chatbots EFL undergraduate students reported using in their academic reading were used to implement different reading comprehension strategies. The findings revealed that ChatGPT was mainly used to implement the overviewing-skimming and the inferring strategies. Gemini, similarly, was used to help implement the overviewing-skimming and the determining meaning strategies. As for Perplexity AI, it was used to implement the overviewing-skimming strategy. Meanwhile, Meta AI was used to assist with the implementation of determining strategy. As for the extent of their use, it varies depending on which strategy is being implemented through the GenAI chatbot. In the implementation of the determining meaning, reflecting, and activating prior knowledge strategies, it has resulted in the change on how the strategies were traditionally carried out. In contrast to this, the implementation of the overviewing-skimming, inferring, and reflecting strategies, remained to be carried out by the students themselves. Meanwhile, in relation to EFL undergraduate students’ response towards the GenAI chatbot’s assistance, it varies from just reading to cross-checking to saving the AI-generated information into their own personal notes, as well as engaging further in a discussion with the GenAI chatbot.

Given the findings above, it can be inferred that ChatGPT, Gemini, Perplexity AI, and Meta AI have facilitated EFL undergraduate students’ English reading comprehension by making both the reading material and reading support more accessible. Their reasons for using them also highlight the GenAI chatbots’ value as a reading assistance, offering students personalized and interactive support while also being accessible and practical to use during self-study or reading. Additionally, in their implementation of reading comprehension strategies through GenAI chatbot-mediated reading, the findings suggest that GenAI chatbots

enhance EFL undergraduate students' ability and confidence to comprehend the English academic reading materials. They would use the GenAI chatbot with caution by trying to counteract its hallucinative and biased nature, indicating their awareness of the chatbot's drawbacks in providing reading assistance. However, it was also found that the EFL students have yet to make use of the GenAI chatbot's personalisation feature to the fullest, may be unaware of the differences in capability that each GenAI chatbot has, prioritize task completion over learning itself, and may even worsen their comprehension skill by over-relying on the GenAI chatbot. Therefore, this research contributes to the existing idea that EFL undergraduate students still need further guidance in their GenAI chatbot use and the importance of regulations and guidelines surrounding the use of GenAI chatbots for learning, notably reading. These findings offer insight into the real-world current practices of using GenAI chatbots by EFL undergraduate students to facilitate their English reading comprehension.

5.2 Suggestion

Taking findings and limitations of this case study into account, the researcher proposed the following suggestions for those involved, including students, teachers, and future researchers.

5.2.1 For Students

To EFL undergraduate students or EFL students in general, the findings of this research help to shed light on the considerations that should be accounted for in using GenAI chatbots to facilitate English reading comprehension. Based on the findings, EFL undergraduate students have already taken action to countermeasure the risks from using GenAI chatbots; however, it was also noted that EFL undergraduate students have yet to use their potential to the fullest. In addition, there were patterns of use that prioritize task completion rather than to facilitate the reading process. Thus, it is suggested for EFL students to be willing to learn

about the tools themselves, understanding how it works and what it was designed for before using them. Moreover, EFL students should first establish a strong conviction, in which to use the GenAI chatbots constructively and meaningfully before utilizing them for reading in order to maximize their pedagogical impact.

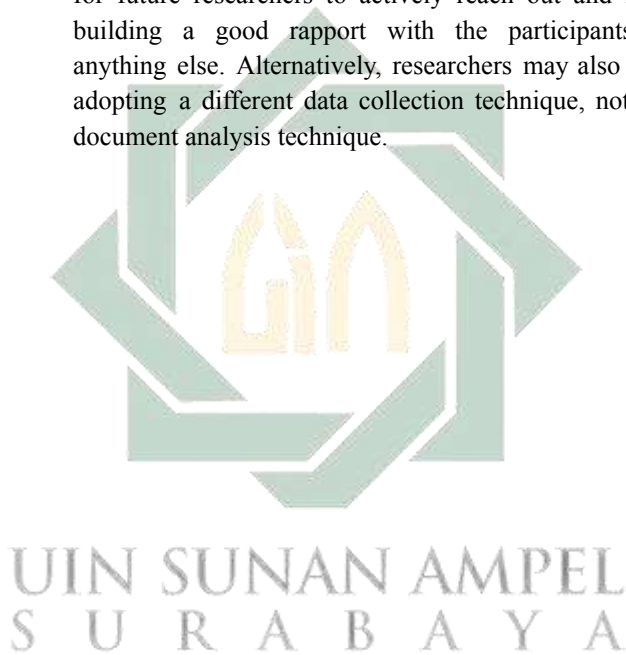
5.2.2 For Teachers

Based on the implications of this research's findings, EFL undergraduate students still require and would benefit from teachers' pedagogical support in their use of GenAI chatbots to facilitate their English reading comprehension. The fine line between constructive and over-reliance on GenAI chatbot use can be difficult for the students to notice, which can be detrimental to their overall English reading comprehension skills in the long-term. Therefore, teachers play an important role in educating and modelling the practice of constructively using GenAI chatbots for reading. In doing so, teachers should define the ethical and legal boundaries that students will follow later during their own practices.

5.2.3 For Future Researchers

The findings of this research help to uncover the current practices of GenAI chatbot use in reading by EFL undergraduate students. During the implementation of some reading comprehension strategies through GenAI chatbot-mediated reading, the practice was now offloaded to be enacted by the chatbots instead in favor of accuracy and efficiency. Hence, it is suggested for future researchers to do a deeper exploration regarding this practice, along with its effect toward students' English reading comprehension skills in the long-term. Meanwhile, in regard to the development of regulations surrounding the use of GenAI chatbots, the tool should strictly be positioned as a facilitator or assistant within EFL students' reading activity.

Furthermore, the researcher found challenges while trying to explore EFL undergraduate students' implementation of the reading comprehension strategy. Many of the EFL undergraduate students were unwilling to participate in the follow-up interview session. Therefore, it is also suggested for future researchers to actively reach out and focus on building a good rapport with the participants before anything else. Alternatively, researchers may also consider adopting a different data collection technique, notably the document analysis technique.



REFERENCES

- Abdallah, M. M. S. (2025). How to Use Conversational AI Chatbots in English Language Teaching/Learning: Developing Linguistic Competencies and Skills and Supporting EFL Teachers' Professional Development. *Online Submission*. <https://files.eric.ed.gov/fulltext/ED674581.pdf>
- Aldreabi, H., Dahdoul, N. K. S., Alhur, M., Alzboun, N., & Alsalhi, N. R. (2025). Determinants of Student Adoption of Generative AI in Higher Education. *Electronic Journal of E-Learning*, 23(1), 15–33. <https://doi.org/10.34190/ejel.23.1.3599>
- Al-Othman, A. A.-A. M. (2024). Using Artificial Intelligence in English As A Foreign Language Classrooms: Ethical Concerns and Future Prospects. *Arab World English Journal*, (10), 85–104. <https://doi.org/10.24093/awej/call10.7>
- Anjarani, S., & Suwartono, T. (2024). GenAI-mediated informal digital learning of English. In *Current Academic Studies in Technology and Education 2023* (pp. 36–52). ISRES Publishing. <https://digitalibrary.ump.ac.id/1376/2/Full%20Text%20-%20Gen%20AI-Mediated%20Informal%20Digital%20Learning%20of%20English.pdf>
- Annamalai, N., Eltahir, M. E., Zyoud, S. H., Soundrarajan, D., Zakarneh, B., & Al Salhi, N. R. (2023). Exploring English Language Learning via Chabot: A Case Study From a Self Determination Theory Perspective. *Computers and Education: Artificial Intelligence*, 5, 100148. <https://doi.org/10.1016/j.caeai.2023.100148>
- Ashour, S. (2025). Evaluating ChatGPT-4's Performance in Summarizing Academic Texts: A Qualitative Analysis Using Self-Authored Publications. In A. Badran & A. Mishrif (Eds.), *Shaping the Future of Development in the GCC* (pp. 69–92). Springer Nature Singapore. https://doi.org/10.1007/978-981-96-7963-8_4
- Badger, M., López, N., & Nissen, C. F. R. (2026). The Impact of GenAI Chatbots on Student Learning in Higher Education: A Literature Review. *International Journal of Technology in Education*, 9(1), 43–69. <https://doi.org/10.46328/ijte.5111>
- Bandi, A., Adapa, P. V. S. R., & Kuchi, Y. E. V. P. K. (2023). The Power of Generative AI: A Review of Requirements, Models,

- Input–Output Formats, Evaluation Metrics, and Challenges. *Future Internet*, 15(8), 260. <https://doi.org/10.3390/fi15080260>
- Baskara, Fx. R. (2025). ChatGPT and Google Gemini in EFL Education: A Qualitative Exploration of Pedagogical Efficacy among Indonesian Sophomores. *Journal of Languages and Language Teaching*, 13(1), 436. <https://doi.org/10.33394/jollt.v13i1.9926>
- Boudia, C., & Bengueddach, A. (2024). *Innovating Higher Education: The Rise of ChatGPT in Collaborative Learning—A Short Review*. International Conference on Research in Education and Science (ICRES). <https://eric.ed.gov/?id=ED673134>
- Busch, M., Collarana, D., Decker, S., Eymann, T., Gutheil, N., Keller, R., Kühl, N., Lange-Bever, C., Mayer, V., Morad, M., Pöllath, L., Röglinger, M., Sharma, R., & Urbach, N. (2025). *Implementing Generative AI Chatbots: Potentials, Challenges, and Guidelines for the Successful Implementation of Generative AI Chatbots into Tourism* [White Paper]. University of Bayreuth. https://www.fit.fraunhofer.de/content/dam/fit/de/documents/Whitepaper_Implementing-Generative-AI-Chatbots.pdf
- Dai, K., & Liu, Q. (2024). Leveraging artificial intelligence (AI) in English as a foreign language (EFL) classes: Challenges and opportunities in the spotlight. *Computers in Human Behavior*, 159, 108354. <https://doi.org/10.1016/j.chb.2024.108354>
- Davar, N. F., Dewan, M. A. A., & Zhang, X. (2025). AI Chatbots in Education: Challenges and Opportunities. *Information*, 16(3), 235. <https://doi.org/10.3390/info16030235>
- Dawadi, S. (2020). Thematic Analysis Approach: A Step by Step Guide for ELT Research Practitioners. *Journal of NELTA*, 25(1–2), 62–71. <https://doi.org/10.3126/nelta.v25i1-2.49731>
- Dinh, C. T. (2025). EFL Students' Perspectives on ChatGPT in Translation: Exploring AI Assistance, Motivation, and Learning Outcomes. *Electronic Journal of E-Learning*, 23(2), Article 2. <https://doi.org/10.34190/ejel.23.2.4006>
- Dzimar, M., Maulida, N. R., Jannah, L. R., & Rahmah, R. E. (2026). *Relationship Between ChatGPT Use and EFL Students' Perceived Usefulness, Ease, Dependence, And Creativity*. 6(01). <https://doi.org/https://doi.org/10.53863/e-jou.v6i01.1904>
- El Hassan, F. A. M., & Alsawah, A. F. (2025). Exploring the Impact of ChatGPT on EFL Reading Practices: Opportunities and

- Challenges. *International Journal of English Language Teaching*, 13(1), 85–93.
<https://doi.org/10.37745/ijelt.13/vol13n18593>
- Farrokhnia, M., Banihashem, S. K., Noroozi, O., & Wals, A. (2024). A SWOT analysis of ChatGPT: Implications for educational practice and research. *Innovations in Education and Teaching International*, 61(3), 460–474.
<https://doi.org/10.1080/14703297.2023.2195846>
- Fitria, T. N. (2025). Revolutionizing English Learning with AI: Insights from ChatGPT and Google Gemini. *International Journal of Computer and Information System (IJCIS)*, 06(02).
<https://doi.org/https://doi.org/10.29040/ijcis.v6i2.219>
- Freed, A. R. (2021). *Conversational AI: Chatbots That Work*. Manning Publications Co.
- Gani, L. F., & Ismahani, S. (2025). *Enhancing Students' Reading Comprehension Through Ai-Based Learning Media "Read-Ai" for 11th Grade High School*. 5(2).
<https://doi.org/doi.org/ijeal.v5i2.6761>
- Gimpel, H., Hall, K., Decker, S., Eyemann, T., Lämmermann, L., Mädche, A., Röglinger, M., Ruiner, C., Schoch, M., Schoop, M., Urbach, N., & Vandirk, V. (2023). *Unlocking the Power of Generative AI Models and Systems such as GPT-4 and ChatGPT for Higher Education: A Guide for Students and Lecturers* (Hohenheim Discussion Papers in Business, Economics and Social Sciences) [White Paper]. University of Hohenheim.
https://digital.uni-hohenheim.de/fileadmin/einrichtungen/digital/Generative_AI_and_ChatGPT_in_Higher_Education.pdf
- Giray, L., Jacob, J., & Gumalin, D. L. (2024). Strengths, Weaknesses, Opportunities, and Threats of Using ChatGPT in Scientific Research. *International Journal of Technology in Education*, 7(1), 40–58. <https://doi.org/10.46328/ijte.618>
- Grübler, A. (1998). *Technology and Global Change*. Cambridge University Press. Cambridge Core.
<https://doi.org/10.1017/CBO9781316036471>
- Hamid, M. A., & Yulianto, Y. (2022). Reading Difficulties of EFL Students: A Case Study of First-Year Students of English Language Education FKIP UIR. *IJET (Indonesian Journal of English*

- Teaching*, 11(1), 46–56.
<https://doi.org/10.15642/ijet2.2022.11.1.46-56>
- Hatmanto, E. D., Purwanti, E., & Diwyacitta, D. K. (2026). Undergraduate EFL Students' Experiences Using Perplexity AI in Academic Writing Assignments: A Qualitative Study. *Proceedings of the International Conference on Sustainable Innovation*, 6(1).
<https://prosiding.umsy.ac.id/icosi/index.php/picosi/article/view/156>
- Hedlin, E., Estling, L., Wong, J., Demmans Epp, C., & Viberg, O. (2025). Got It! Prompting Readability Using ChatGPT to Enhance Academic Texts for Diverse Learning Needs. *Proceedings of the 15th International Learning Analytics and Knowledge Conference*, 115–125. <https://doi.org/10.1145/3706468.3706483>
- Herdawan, D., Sari, D. W., & Setyoningrum, A. A. D. (2026). Supporting Extensive Reading with ChatGPT: A Qualitative Study of Student Experiences in an EFL Context. *J-SHMIC: Journal of English for Academic*, 13(1).
[https://doi.org/https://doi.org/10.25299/jshmic.2026.vol13\(1\).27167](https://doi.org/https://doi.org/10.25299/jshmic.2026.vol13(1).27167)
- Hidayati, N. N., & Nihayah, D. H. (2024). Google Translate, ChatGPT or Google Bard AI: A Study toward Non-English Department College Students' Preference and Translation Comparison. *Inspiring: English Education Journal*, 7(1), 14–33.
<https://doi.org/10.35905/inspiring.v7i1.8821>
- Ho, P. X. P. (2024). Using ChatGPT in English Language Learning: A Study on I.T. Students' Attitudes, Habits, and Perceptions. *International Journal of TESOL & Education*, 4(1), 55–68.
<https://doi.org/10.54855/ijte.24414>
- Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education: Promise and Implications for Teaching and Learning*. Center for Curriculum Redesign.
https://www.researchgate.net/publication/332180327_Artificial_Intelligence_in_Education_Promise_and_Implications_for_Teaching_and_Learning
- Huang, H. L., Hwang, G.-J., Chen, P.-Y., & Hwang, G.-H. (2026). Effects of graphical summarization and AI-based chatbots on learners' reading comprehension achievement, motivation, self-efficacy, critical thinking and cognitive load. *Educational Technology*

- Research and Development*, 74(2), 973–999.
<https://doi.org/10.1007/s11423-025-10583-x>
- Huang, W., Hew, K. F., & Fryer, L. K. (2021). Chatbots for Language Learning—Are They Really Useful? A Systematic Review of Chatbot-Supported Language Learning. *Journal of Computer Assisted Learning*. <https://doi.org/10.1111/jcal.12610>
- Huang, X., Zou, D., Cheng, G., Chen, X., & Xie, H. (2023). Trends, Research Issues and Applications of Artificial Intelligence in Language Education. *Educational Technology & Society*, 26(1), 112–131.
[https://doi.org/10.30191/ETS.202301_26\(1\).0009](https://doi.org/10.30191/ETS.202301_26(1).0009)
- Ironsi, C. S., & Bostanci, H. B. (2026). Enhancing the reading comprehension and autonomy of foreign language students using generative AI-integrated assistants. *Frontiers in Education*, 11, 1763238. <https://doi.org/10.3389/feduc.2026.1763238>
- K. Rajamani, Dr., & Rajaseela, S. (2025). Comparative Analysis of Perplexity AI and ChatGPT in Enhancing Academic Research and Professional Productivity. *International Journal of Research and Analytical Reviews*, 12(4).
<https://doi.org/10.56975/ijrar.v12i4.321938>
- Kafabih, A., Apriliana, M. S., Putri, N. A., Wardoyo, E., Retnani, S. T., Herda, R. K., & Majid, S. (2026). AI Tools for Personalized English Learning: Bridging the Gap Between Technology and Language Acquisition. *Jurnal Wahana Pendidikan*, 13(1), 1.
<https://doi.org/10.25157/jwp.v13i1.22475>
- Kim, R. (2024). Effects of ChatGPT on Korean EFL Learners' Main-Idea Reading Comprehension via Top-Down Processing. *Language Research*, 60(1), 83–106.
<https://doi.org/10.30961/lr.2024.60.1.83>
- Kovačić, A., & Bubaš, G. (2023). *Using Conversational Artificial Intelligence for Online Learning Activities in English for Specific Purposes: A Pilot Study of Innovation in Language Learning*. <https://doi.org/Filodiritto%20Publisher>
- Kurniawaty, M. A. P. (2025). *Efl Students' Perceptions of Artificial Intelligence (AI) in English Class: A Focus on Reading Skills*. 12(4). <https://doi.org/10.8734/Argopuro.v1i2.365>

- Li, J. (2025). Examining EFL learners' source text use in summary writing. *Language Teaching Research*, 29(1), 150–173. <https://doi.org/10.1177/13621688211055887>
- Lin, C.-H., Zhou, K., Li, L., & Sun, L. (2025). Integrating Generative AI into Digital Multimodal Composition: A Study of Multicultural Second-Language Classrooms. *Computers and Composition*, 75, 102895. <https://doi.org/10.1016/j.compcom.2024.102895>
- Liu, C.-C., Liao, M.-G., Chang, C.-H., & Lin, H.-M. (2022). An Analysis of Children' Interaction with an AI Chatbot and its Impact on their Interest in Reading. *Computers & Education*, 189, 104576. <https://doi.org/10.1016/j.compedu.2022.104576>
- Ma'rifah, U., Masrifah, N., & Arifani, Y. (2021). Technological Use in EFL Instruction: Investigating Teachers' Pedagogical Beliefs and Students' Learning Engagement. *Lensa: Kajian Kebahasaan, Kesusastraan, Dan Budaya*, 11(1), 17. <https://doi.org/10.26714/lensa.11.1.2021.17-32>
- Marr, B. (2024). *Generative AI in Practice: 100+ Amazing Ways Generative Artificial Intelligence is Changing Business and Society*. John Wiley & Sons, Inc.
- Mathers, N., Fox, N., & Hunn, A. (2002). Using Interviews in a Research Project. In *Research Approaches in Primary Care*. Trent Focus Group.
- McGrath, C., Farazouli, A., & Cerratto-Pargman, T. (2025). Generative AI Chatbots in Higher Education: A Review of An Emerging Research Area. *Higher Education*, 89(6), 1533–1549. <https://doi.org/10.1007/s10734-024-01288-w>
- McTear, M., Pilehvar, M. T., Camacho-Collados, J., Farzindar, A. A., Inkpen, D., Dror, R., Peled, L., Shlomov, S., Reichart, R., Narayan, S., Gardent, C., Bender, E. M., & Lascarides, A. (2021). *Conversational AI: Dialogue Systems, Conversational Agents, and Chatbots*. Morgan & Claypool.
- Mohale, N. E., & Suliman, Z. (2025). The Influence of Generative AI and Its Impact on Critical Cognitive Engagement In an Open Access, Distance Learning University. *Compass: Journal of Learning and Teaching in Higher Education*, 18(1). <https://doi.org/10.21100/compass.v18i1.1588>
- Montebello, M. (2026). From Cognitive Necessity to Cognitive Choice: Higher Education Assessment and Learning in the Age of

- Generative AI. *AI in Education*, 2(2), 12.
<https://doi.org/10.3390/aieduc2020012>
- Moon, H., Chung, Y., & Randolph, A. W. (2025). Teaching and Learning Languages with ChatGPT: Challenges and Opportunities in Multilingual Classrooms in Higher Education. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 10(1). <https://doi.org/https://doi.org/10.21093/ijeltal.v10i1.1991>
- Muman, M. (2025). Enhancing English Reading Skills through ChatGPT-OpenAI: A Study on Vocational High School Students. *Jurnal Pemberdayaan Masyarakat*, 4(1), 210–219. <https://doi.org/10.46843/jpm.v4i1.406>
- Negoită, D. O., & Popescu, M. A. M. (2023). The Use of Artificial Intelligence in Education. *Towards Increased Business Resilience: Facing Digital Opportunities and Challenges*, 11(1), 1–2. <https://doi.org/https://doi.org/10.56177/11icmie2023.43>
- Nguyen, H. A. (2025). MA Students' Perceptions and Experiences with the Gemini App in English Language Learning: A Mixed-Methods Study at Van Lang University, Vietnam. *International Journal of AI in Language Education*, 2(2), 1–19. <https://doi.org/10.54855/ijaile.25221>
- Nurhayati, D., Julyan, R., & Williyan, A. (2023). Investigating EFL Learners' Reading Difficulties and The Possible Solutions. *NextGen Education Review Journal*, 1(1). <https://doi.org/10.58660/nextgen.v1i1.32>
- Panagiotidis, P. (2024). LLM-Based Chatbots in Language Learning. *European Journal of Education*, 7(1).
- Pande, A., Patil, R., Mukkemwar, R., Panchal, R., & Bhoite, S. (2024). *Comprehensive Study of Google Gemini and Text Generating Models: Understanding Capabilities and Performance*. Conference: 15th International Conference on Advances in Computing, Control, and Telecommunication Technologies, ACT 2024.
https://www.researchgate.net/publication/386101230_Comprehensive_Study_of_Google_Gemini_and_Text_Generating_Models_Understanding_Capabilities_and_Performance
- Patty, J., & Lekatompeppy, F. M. (2025). *Opportunities and Challenges of Using Gemini AI for English Language Learning*. 6(2). <https://doi.org/https://doi.org/10.30598/koli.6.1.122-141>

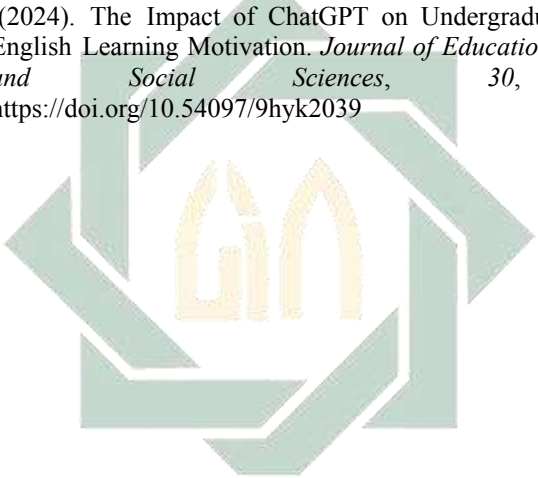
- Pondelíková, I., & Luprichová, J. (2024, October 26). AI-Assisted Enhancing of Gender Awareness Through Reading Comprehension in History and Literature Courses of Anglophone Cultures. *Proceedings of the 21st International Conference on Cognition and Exploratory in the Digital Age*. 21st International Conference on Cognition and Exploratory in the Digital Age. https://doi.org/10.33965/CELDA2024_202408L025
- Pressley, M., & Afflerbach, P. (1995). *Verbal Protocols of Reading: The Nature of Constructively Responsive Reading*. Lawrence Erlbaum Associates, Inc. <https://andymatuschak.org/files/papers/Pressley,%20Afflerbach%20-%201995%20-%20Verbal%20Protocols%20of%20Reading.pdf>
- Putri, S. N., & Jaya, S. (2026). EFL students' use of AI as collaborative learning tools: Practices and perspectives. *English Learning Innovation*, 7(1), 176–192. <https://doi.org/10.22219/englie.v7i1.42663>
- Ramadhani, O., & Hamid, A. I. R. (2025). Students' Perceptions Towards DeepSeek as a Supporting Tool in English Language Learning. *English Community Journal*, 2(1). <https://doi.org/https://doi.org/10.32502/ecj.v9i1.9912>
- Ravšelj, D., Keržič, D., Tomaževič, N., Umek, L., Brezovar, N., A. Iahad, N., Abdulla, A. A., Akopyan, A., Aldana Segura, M. W., AlHumaid, J., Allam, M. F., Alló, M., Andoh, R. P. K., Andronic, O., Arthur, Y. D., Aydın, F., Badran, A., Balbontin-Alvarado, R., Ben Saad, H., ... Aristovnik, A. (2025). Higher education students' perceptions of ChatGPT: A global study of early reactions. *PLOS ONE*, 20(2), e0315011. <https://doi.org/10.1371/journal.pone.0315011>
- Rismanchian, S., Babar, E. T. R., & Doroudi, S. (2026). What Undergraduate Students Need to Know and Actually Know About Generative AI. *Computers and Education: Artificial Intelligence*, 10, 100554. <https://doi.org/10.1016/j.caeai.2026.100554>
- Russell, S. J., & Norvig, P. (with Davis, E., & Edwards, D.). (2016). *Artificial Intelligence: A Modern Approach* (Third edition, Global edition). Pearson.

- Sagita, M., Sagita, E. S., & Syafari, N. (2025). The Role of Generative AI Companions in Promoting Reading Engagement and Self-Regulation in EFL Contexts. *Journal of Pedagogy and Education Science*, 4(03), 448–465. <https://doi.org/10.56741/IISTR.jpes.001082>
- Satiti, L. H., Fauziati, E., & Seytaningsih, E. (2024). AI Chatbot as an Effective English Teaching Partner for University Students. *International Journal of Educational Research & Social Sciences*, 5(3), 463–469. <https://doi.org/10.51601/ijersc.v5i3.820>
- Slamet, J. (2024). Potential of ChatGPT as a Digital Language Learning Assistant: EFL Teachers' and Students' Perceptions. *Discover Artificial Intelligence*, 4(1), 46. <https://doi.org/10.1007/s44163-024-00143-2>
- Snow, C. E. (2002). *Reading for Understanding: Toward an R&D Program in Reading Comprehension*. RAND Corporation. <https://www.videnomlaesning.dk/media/2526/reading-for-understanding.pdf?utm>
- Sol, K., Heng, K., & Sok, S. (2024). *Using AI in English Language Education: An Exploration of Cambodian EFL University Students' Experiences, Perceptions, and Attitudes* (SSRN Scholarly Paper No. 4687461). Social Science Research Network. <https://doi.org/10.2139/ssrn.4687461>
- Soori, M., Arezoo, B., & Dastres, R. (2023). Artificial Intelligence, Machine Learning and Deep Learning in Advanced Robotics, a Review. *Cognitive Robotics*, 3, 54–70. <https://doi.org/10.1016/j.cogr.2023.04.001>
- Stanley, G. (2013). *Language Learning with Technology: Ideas for Integrating Technology in the Classroom*. Cambridge University Press.
- Susilowati, D., Zainuddin, Z., & Islam, R. (2025). The Role of Meta AI WhatsApp in Enhancing English Reading Skills of Higher Education. *Journal of English Language and Education*, 10(3), 503–513. <https://doi.org/10.31004/jele.v10i3.947>
- Tahir, M., & Jahrir, A. S. (2025). *Exploring ChatGPT as a Replacement for Traditional Reading: Perceptions of English Education Postgraduate Students*. 6(4). <https://foster.pbi-iainpalopo.ac.id/index.php/contents/article/view/310/152>

- Tan, P. T., Hien, L. N., & Phuong, T. V. T. (2025). *Using Chatgpt, Gemini, and Grok in Learning English: Students' Perspectives at a Vietnamese University*. TESOL International Conference 2025. <https://tesol.hufliit.edu.vn/event/1/contributions/6/>
- Utami, N. P., Kembaren, F. R., & Daulay, S. H. (2024). Exploring Higher Education Learners' Experience of Utilizing Gemini Chatbot in English Language Learning. *RETORIKA: Jurnal Ilmu Bahasa*, 10(3), 680–694.
- Vorobyeva, K. I., Belous, S., Savchenko, N. V., Smirnova, L. M., Nikitina, S. A., & Zhdanov, S. P. (2025). Personalized learning through AI: Pedagogical approaches and critical insights. *Contemporary Educational Technology*, 17(2), ep574. <https://doi.org/10.30935/cedtech/16108>
- Wei, L. (2023). Artificial Intelligence in Language Instruction: Impact on English Learning Achievement, L2 Motivation, and Self-Regulated Learning. *Frontiers in Psychology*, 14, 1261955. <https://doi.org/10.3389/fpsyg.2023.1261955>
- Xiao, Y., & Zhi, Y. (2023). An Exploratory Study of EFL Learners' Use of ChatGPT for Language Learning Tasks: Experience and Perceptions. *Languages*, 8(3), 212. <https://doi.org/10.3390/languages8030212>
- Yen, N. T. Q. (2024). Unraveling the Potential of ChatGPT: Investigating the Efficacy of Reading Text Adaptation. *Proceedings of the AsiaCALL International Conference*, 4, 159–169. <https://doi.org/10.54855/paic.23412>
- Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods* (Sixth edition). SAGE.
- Yin, X., Ruan, J., & Ma, W. (2025). The Impact of Generative AI on Foreign Language Enjoyment: The Roles of Gender, English Proficiency and Usage Duration Among Chinese EFL Learners. *BMC Psychology*, 14(1), 134. <https://doi.org/10.1186/s40359-025-03870-y>
- Zeng, S. (2018). *English Learning in the Digital Age: Agency, Technology and Context*. Springer.
- Zhang, C., Zhang, C., Zheng, S., Qiao, Y., Li, C., Zhang, M., Dam, S. K., Thwal, C. M., Tun, Y. L., Huy, L. L., Kim, D., Bae, S.-H., Lee, L.-H., Yang, Y., Shen, H. T., Kweon, I. S., & Hong, C. S. (2023). *A Complete Survey on Generative AI (AIGC): Is ChatGPT from*

GPT-4 to GPT-5 All You Need?
<https://doi.org/10.13140/RG.2.2.29980.16001>

- Zheng, S. (2024). The Effects of Chatbot Use on Foreign Language Reading Anxiety and Reading Performance Among Chinese Secondary School Students. *Computers and Education: Artificial Intelligence*, 7, 100271.
<https://doi.org/10.1016/j.caeai.2024.100271>
- Zhou, W. (2024). The Impact of ChatGPT on Undergraduate Student's English Learning Motivation. *Journal of Education, Humanities and Social Sciences*, 30, 33–39.
<https://doi.org/10.54097/9hyk2039>



UIN SUNAN AMPEL
 S U R A B A Y A

APPENDICES

Appendix 1: [Research Instruments](#)

1. Open-ended Questionnaire

QUESTIONNAIRE
EFL Undergraduate Students' Use of
Generative AI Chatbots to Facilitate Reading Comprehension

This questionnaire was designed to gather and screen potential participants for a research project that aims to explore EFL undergraduate students' use of generative AI chatbots to facilitate their reading comprehension. The questionnaire is to be filled out by students studying in the English Language Education Department (ELED) at the Islamic State University of Sunan Ampel Surabaya (UINSA) who are in their 2nd, 4th, 6th, and 8th semesters. Responses will be kept confidential and used solely for research purposes.

By completing this questionnaire, you confirm your willingness to provide information regarding the research topic, which is "EFL Undergraduate Students' Use of Generative AI Chatbots to Facilitate Reading Comprehension". Additional information: Follow-up interviews will be conducted with several respondents. You are free to accept or decline the interview offer.

☐ I have read the information above and am willing to participate in this research.

Name : _____
Semester : _____
Phone Number : _____

1. Have you used generative AI chatbots (for example: *ChatGPT*, *Gemini*, *DeepSeek*, etc.) to assist you in your academic reading or studying for at least 3 months or more?

☐ Yes ☐ No

2. What generative AI chatbot platform do you mainly use to support your academic reading or study?

☐ ChatGPT ☐ Gemini ☐ DeepSeek ☐ Perplexity AI
☐ Bing Chat ☐ Meta AI ☐ Pi ☐ Others: _____

3. Why do you prefer this platform over other generative AI chatbots?

4. What is your main reason for using generative AI chatbots in your academic reading or study?

5. How often do you use the generative AI chatbots to support your academic reading or study?

- ☐ Several times a week ☐ Once a week ☐ 1 - 3 times a month ☐ Less than once a month

6. What is the basis for this frequency of generative AI chatbot use?

7. What kind of assistance do you usually request from a generative AI chatbot to support your academic reading or study? *(you may choose more than one answer)*

- | | |
|---|---|
| ☐ To help give an overview or find certain information from a text. | ☐ To help translate or find the meaning of words that you are not familiar with a text? |
| ☐ To help figure out the implicit meaning behind a word or sentence in a text. | ☐ To help make prediction or hypothesis about the ideas before reading a text. |
| ☐ To help take notes of important information by underlining, highlighting, circling, listing, visualizing, summarizing, outlining, or paraphrasing sentences in a text? | ☐ To help assess the quality, credibility, or emotional impact of the text, and connect the ideas to your own experiences and beliefs. |

☐ Others: _____

8. Why do you ask for that kind of assistance from the generative AI chatbot?

9. Do you feel satisfied or helped by the existence of the generative AI chatbot to support your academic reading or study?

2. Semi-Structured Interview Guideline

INTERVIEW GUIDELINE			
EFL Undergraduate Students' Use of Generative AI Chatbots to Facilitate Reading Comprehension			

Participant Name	:	Semester	:
Interview Date	:	Frequency of Use	:
Interview Duration	:	Gen AI Chatbot Used	:

Assalamu'alaikum wr.wb.

First of all, thank you very much for your time. Allow me to introduce myself again. My name is Alya Hanun Putri Wibowo, an 8th-semester English Education student at UINSA. I intend to interview you as part of my thesis research, which focuses on how students use generative AI chatbots to support their English reading comprehension. So, I'd like to know how [Name] uses [AI] to help them understand books, articles, or other reading materials in English.

The interview itself will probably last around 20-30 minutes. For documentation purposes, I'd like to record the conversation during the interview. Of course, the information shared in this interview will be kept confidential and used solely for research purposes. Okay, allow me to start the recording.

Let me begin by making sure that—

Are you, [Name], willing to be interviewed?

Perhaps you could answer the question by stating your name and what semester you're in.

Interview Questions :	Reason for Using Generative AI Chatbot 1. In the questionnaire, it was mentioned that you use generative AI chatbot while reading, what are your reasons for using it?
	Purpose for Using Generative AI Chatbot (Reading Comprehension Strategy) Previously, it was also mentioned through the questionnaire (No. 6) that the form of assistance you usually request from generative AI chatbots are... ☐ Make predictions or hypotheses about the ideas or topics of a text before reading it. - (activating prior knowledge) ☐ Read through the whole text briefly or skim over sections of a text. - (overviewing and skimming) ☐ Figure out the meanings that are not clearly stated from a word or sentence to understand a text. - (inferring)

	☐ Look for translations or meanings of words you are not familiar with in a text. - (determining meaning)
	☐ Take notes of important information in the form of lists, visualizations (tables or diagrams), and summaries in a text. - (making notes)
	☐ Assess the quality, credibility, or emotional impact of a text and connect ideas in the text to your own experiences or beliefs. - (evaluating and reflecting)
	2. How much of a role does generative AI chatbot play in helping you implement these reading strategies? What do you do and what does the AI help you with? (in terms of scale and effort)
	Response to the Generative AI Chatbot's Assistances
	3. When you are already satisfied with the response given by the generative AI chatbot, what do you do after with the assistance or response you received? and why?
Okay, since all the questions have been answered, that concludes the interview. Is there anything you would like to add or ask regarding this research? And if I need further clarification, may I contact you again? Okay, once again, thank you very much for the time and information [Name] has shared. Thank you also for helping me complete this thesis. May Allah SWT reward you with the best of rewards. Wassalamu'alaikum wr.wb.	

Appendix 2: [Result of Data Collection](#)

1. Online Survey

EFL Undergraduate Students' Reasons for Using Instagram as Chatbot in Their Learning				
No	Theme	Sub-Themes	Code	Participants
ChatGPT (All Students)				
1.	Need for Input Reading (R)	Unfamiliar Content	"There is a tendency to read more in an interactive, conversational, and more free way rather than to read...". - P28	P28, P44, P45, P46, P47, P48, P49, P50, P51, P52, P53, P54, P55, P56, P57, P58, P59, P60, P61, P62, P63, P64, P65, P66, P67, P68, P69, P70, P71, P72, P73, P74, P75, P76, P77, P78, P79, P80, P81, P82, P83, P84, P85, P86, P87, P88, P89, P90, P91, P92, P93, P94, P95, P96, P97, P98, P99, P100, P101, P102, P103, P104, P105, P106, P107, P108, P109, P110, P111, P112, P113, P114, P115, P116, P117, P118, P119, P120, P121, P122, P123, P124, P125, P126, P127, P128, P129, P130, P131, P132, P133, P134, P135, P136, P137, P138, P139, P140, P141, P142, P143, P144, P145, P146, P147, P148, P149, P150, P151, P152, P153, P154, P155, P156, P157, P158, P159, P160, P161, P162, P163, P164, P165, P166, P167, P168, P169, P170, P171, P172, P173, P174, P175, P176, P177, P178, P179, P180, P181, P182, P183, P184, P185, P186, P187, P188, P189, P190, P191, P192, P193, P194, P195, P196, P197, P198, P199, P200, P201, P202, P203, P204, P205, P206, P207, P208, P209, P210, P211, P212, P213, P214, P215, P216, P217, P218, P219, P220, P221, P222, P223, P224, P225, P226, P227, P228, P229, P230, P231, P232, P233, P234, P235, P236, P237, P238, P239, P240, P241, P242, P243, P244, P245, P246, P247, P248, P249, P250, P251, P252, P253, P254, P255, P256, P257, P258, P259, P260, P261, P262, P263, P264, P265, P266, P267, P268, P269, P270, P271, P272, P273, P274, P275, P276, P277, P278, P279, P280, P281, P282, P283, P284, P285, P286, P287, P288, P289, P290, P291, P292, P293, P294, P295, P296, P297, P298, P299, P300, P301, P302, P303, P304, P305, P306, P307, P308, P309, P310, P311, P312, P313, P314, P315, P316, P317, P318, P319, P320, P321, P322, P323, P324, P325, P326, P327, P328, P329, P330, P331, P332, P333, P334, P335, P336, P337, P338, P339, P340, P341, P342, P343, P344, P345, P346, P347, P348, P349, P350, P351, P352, P353, P354, P355, P356, P357, P358, P359, P360, P361, P362, P363, P364, P365, P366, P367, P368, P369, P370, P371, P372, P373, P374, P375, P376, P377, P378, P379, P380, P381, P382, P383, P384, P385, P386, P387, P388, P389, P390, P391, P392, P393, P394, P395, P396, P397, P398, P399, P400, P401, P402, P403, P404, P405, P406, P407, P408, P409, P410, P411, P412, P413, P414, P415, P416, P417, P418, P419, P420, P421, P422, P423, P424, P425, P426, P427, P428, P429, P430, P431, P432, P433, P434, P435, P436, P437, P438, P439, P440, P441, P442, P443, P444, P445, P446, P447, P448, P449, P450, P451, P452, P453, P454, P455, P456, P457, P458, P459, P460, P461, P462, P463, P464, P465, P466, P467, P468, P469, P470, P471, P472, P473, P474, P475, P476, P477, P478, P479, P480, P481, P482, P483, P484, P485, P486, P487, P488, P489, P490, P491, P492, P493, P494, P495, P496, P497, P498, P499, P500, P501, P502, P503, P504, P505, P506, P507, P508, P509, P510, P511, P512, P513, P514, P515, P516, P517, P518, P519, P520, P521, P522, P523, 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P1448, P1449, P1450, P1451, P1452, P1453, P1454, P1455, P1456, P1457, P1458, P1459, P1460, P1461, P1462, P1463, P1464, P1465, P1466, P1467, P1468, P1469, P1470, P1471, P1472, P1473, P1474, P1475, P1476, P1477, P1478, P1479, P1480, P1481, P1482, P1483, P1484, P1485, P1486, P1487, P1488, P1489, P1490, P1491, P1492, P1493, P1494, P1495, P1496, P1497, P1498, P1499, P1500, P1501, P1502, P1503, P1504, P1505, P1506, P1507, P1508, P1509, P1510, P1511, P1512, P1513, P1514, P1515, P1516, P1517, P1518, P1519, P1520, P1521, P1522, P1523, P1524, P1525, P1526, P1527, P1528, P1529, P1530, P1531, P1532, P1533, P1534, P1535, P1536, P1537, P1538, P1539, P1540, P1541, P1542, P1543, P1544, P1545, P1546, P1547, P1548, P1549, P1550, P1551, P1552, P1553, P1554, P1555, P1556, P1557, P1558, P1559, P1560, P1561, P1562, P1563, P1564, P1565, P1566, P1567, P1568, P1569, P1570, P1571, P1572, P1573, P1574, P1575, P1576, P1577, P1578, P1579, P1580, P1581, P1582, P1583, P1584, P1585, P1586, P1587, P1588, P1589, P1590, 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OPEN-ENDED SURVEY RESULT (Percentage)						
Students' Implementation of Reading Comprehension Strategy through Generative AI Chatbot-Mediated Reading						
No.	Purpose of Use (Reading Comprehension Strategy)	Generative AI Chatbot				Total (%)
		ChatGPT	Gemini	Perplexity AI	Meta AI	
1.	Untuk membantu "memberikan gambaran umum atau menemukan informasi tertentu" dalam sebuah teks. (Overview and Skimming)	22,8%	22,2%	100,0%	-	36,3%
2.	Untuk membantu "menerjemahkan atau menjelaskan makna" dari kata-kata yang tidak anda kenal dalam sebuah teks. (Determining Meaning)	21,7%	22,2%	-	100,0%	36,0%
3.	Untuk membantu "menjelaskan makna tersirat" dibalik sebuah kata atau kalimat dalam sebuah teks. (Inferring)	22,8%	16,7%	-	-	9,9%
4.	Untuk membantu "menilai" kualitas, kredibilitas, atau dampak emosional teks dan "menghubungkan" ide dalam teks dengan pengalaman atau keyakinan anda sendiri. (Evaluating and Reflecting)	12,0%	16,7%	-	-	7,2%
5.	Untuk membantu "membuat prediksi atau hipotesis seputar ide atau topik" sebuah teks sebelum membacanya. (Activating Prior Knowledge)	12,0%	5,6%	-	-	4,4%
6.	Untuk membantu "mencatat informasi penting" dalam bentuk daftar (list), visualisasi (tabel, atau gambar diagram), dan rangkuman dalam sebuah teks. (Making Notes)	8,7%	16,7%	-	-	6,3%
Total		92	18	1	1	100%

OPEN-ENDED SURVEY RESULT (Number of Students)						
Students' Implementation of Reading Comprehension Strategy through Generative AI Chatbot-Mediated Reading						
No.	Purpose of Use (Reading Comprehension Strategy)	Generative AI Chatbot				Total (n)
		ChatGPT	Gemini	Perplexity AI	Meta AI	
1.	Untuk membantu "memberikan gambaran umum atau menemukan informasi tertentu" dalam sebuah teks. (Overview and Skimming)	21	4	1	-	26
2.	Untuk membantu "menerjemahkan atau menjelaskan makna" dari kata-kata yang tidak anda kenal dalam sebuah teks. (Determining Meaning)	20	4	-	1	25
3.	Untuk membantu "menjelaskan makna tersirat" dibalik sebuah kata atau kalimat dalam sebuah teks. (Inferring)	21	3	-	-	24
4.	Untuk membantu "menilai" kualitas, kredibilitas, atau dampak emosional teks dan "menghubungkan" ide dalam teks dengan pengalaman atau keyakinan anda sendiri. (Evaluating and Reflecting)	11	3	-	-	14
5.	Untuk membantu "membuat prediksi atau hipotesis seputar ide atau topik" sebuah teks sebelum membacanya. (Activating Prior Knowledge)	11	1	-	-	12
6.	Untuk membantu "mencatat informasi penting" dalam bentuk daftar (list), visualisasi (tabel, atau gambar diagram), dan rangkuman dalam sebuah teks. (Making Notes)	8	3	-	-	11
Total		92	18	1	1	112

2. Individual Interview

1. In the questionnaire, it was mentioned that you use generative AI chatbot while reading, what are your reasons for using it?

P8C	Actually, it's because of the time I need. I mean, AI is flexible. When I need it, I can just ask and get a quick answer. It's different when I ask a lecturer, or even a professor. I have to contact them first, wait, and it's the same with friends, we have to assess their situation, and so on. As for me, why do I prefer using AI? Well, because whenever I need it, I can immediately ask, immediately discuss, immediately ask for help without having to check the time and understand their feelings, like that. Yes, ChatGPT makes it really easy. Besides saving time, this AI makes it easier for me to understand the meaning, whether it's the Indonesian meaning or the hidden meaning of the reading. Usually, I ask for help to summarize, because the books are usually hundreds of pages long. Whether it's a book, or even a book or an article, they're usually quite long. I think that makes it incredibly easy for me. And usually I ask them to give me the page, ask them to show me, where did you answer this, where is it. So when I get the answer from them, I can make sure I go back to the article, oh, it's really here. So I don't just understand ChatGPT's perspective, but I can also understand the perspective based on my own perspective, but it's faster, I don't have to read everything from top to bottom.
P8M	My own reasons for choosing Gemini AI are that I think ChatGPT is too general, and it seems like it's used too much, and its AI is very powerful. So, Gemini's language is more human-like, more natural, not like AI. So, I chose Gemini. And why? Sometimes I use it for brainstorming, brainstorming, and it helps me a bit with my research. I sometimes use Gemini to understand the meaning of this theory. That's right, I use it to understand the material. So, I use it to explain the meaning of this theory and then provide examples. I also use it for translation. Sometimes it takes too long to use another AI specifically for translation, so I just use Gemini itself. So, it's also for translation, brainstorming, understanding the material, and creating examples.
P6B	Because I naturally use ChatGPT. English journal articles often contain many unfamiliar words, and I'm naturally not familiar with them. So, I took a few sentences and put them into ChatGPT to understand their meaning, their significance, and, of course, to make my work easier.
P6G	So, I often ask ChatGPT questions. For example, if there's an article in English, the language is usually standard, so I just ask ChatGPT. Please help me create easy-to-understand sentences from this text. So, to help simplify the language. So it's really easy to understand. Sometimes I use Indonesian. I use Indonesian more often, though, so it's quicker.
P4D	Yes, the main reason is to save time. Because articles or books are so voluminous, it's almost impossible to read them manually from start to finish. So using ChatGPT makes things easier. Sometimes, if an article or book is in English, we don't really understand the content. So, I use ChatGPT to explain the gist of the book. Basically, I explain the content of the book or translate it so we understand. Because I don't really understand English, so I translate and simplify. I have. Because sometimes there are terms or words in the book that I don't really understand. They seem very scientific. So, I use CGPT to explain what they mean.
P4E	And then, as I mentioned earlier, I was definitely confused too. Like, in these three books, there were sentences I really didn't understand. English is really confusing. So, I ended up putting those three books into Gemini, like, what do books A, B, and C mean? Then, from there, I looked for summaries like that. That really helped me with this assignment. After that, I'd look it up myself. Yes, it's true, like some of those books are really hard to understand. Although English is certainly confusing, there are things I really don't understand. This is a new word, new vocabulary like that. So, I was like, "Oh, okay, just ask Gemini." It's also faster, right?

	Oh, yeah, that's part of the process. So, if I'm confused, I'll put this, how, this, and that. Then we'll discuss it, "Oh, so the gist of it is like this." Basically, there's a debate there, like we're just chatting like friends, and we all understand each other. So, for example, if I don't understand a book and I ask for help, we'll end up understanding it better than if I read it from the book. I'd just like to add that, before AI, I definitely did, outside of looking for books or reference articles. For example, when looking for answers about English, I'd go to websites first. Then, after I'd read the website but still didn't understand, I'd go to AI. Reading books is the same thing, like reading first, and then if I don't understand, I'd go to AI. Yes, there was a question about whether it was helpful or not. I think it was really helpful for me when I didn't understand. Even just asking questions, sometimes asking people or friends, might be limited, but with AI, we can do it whenever and as much as we want, and we're free.
P2C	For example, helping with the material, ChatGPT helps us find relevant articles, then study them, and then analyze them again. Yes, there are some things like that. There are difficult words, so we look up the meaning on Google, or we use ChatGPT. To save time, I actually understand better if I read it myself, but sometimes there are a lot of articles, so if I can't get through it, I ask ChatGPT to summarize it. Yes, because there are a lot of articles, there are several.
P2E	Okay. Actually, it's not just Gemini, ma'am. I've tried various AIs, one, two, and three, but I feel like Gemini is the best fit because it's like AI. This might be Google's official AI, but I don't know for sure if it's official or not. I mean, I don't need to download it from the Play Store or anywhere; it's already on my phone. So Gemini is there right away. Secondly, I compared answers from Gemini, ChatGPT, and then yesterday's Blackbook. That seems more academic, more complex, and more what I need, ma'am, from Gemini. Oh yeah, usually I read it first, then interpret it, then create it, construct new sentences, ma'am. How do you do it? It's from an article, and I don't really understand it, so I put it in Gemini. Then, if I don't understand something, I ask, and to use it, I answer, for example, like you were asked to analyze an article. Okay, ma'am, it's really hard to say. Yes, there were some things in that article that I didn't understand, so I went to Gemini. Simplifying the language.

2. How much of a role does generative AI chatbot play in helping you implement these reading strategies? What do you do and what does the AI help you with? (APK / OV / SK / IN / DM / MN / EV / RF)

P8C	I usually just give the keyword, not just to summarize a book, but also to ask, "Please explain." For example, I'm looking for vocabulary, discussing vocabulary. Explain the vocabulary in this book. Then they'll immediately give a very long answer. Then I ask for it, don't forget to tell me which page. Then I make sure, that's usually how it is. I read it myself again. It depends. Sometimes it's the whole article. But sometimes I focus on vocabulary retention, so I ask about vocabulary retention across all pages, usually. Not just on certain pages. But with thick books that are hundreds of pages long, there are sometimes limits. So I usually break it down from my own perspective. So which chapter discusses what I'm looking for, that's the chapter I post to ChatGPT. Now, for the Indonesian translation, I search for it myself first. I'll search first, either on Google Translate or on YouTube or wherever. I'll search for it myself. If I'm really pressed for time, because the deadline is tonight, it turns out. So I'll just go straight to ChatGPT. But for that, I'm too lazy. I'm still searching. Because not all the meanings will be the same, if I search on Google. So I usually just ask ChatGPT to explain it in baby language, in Indonesian. Of course. After I ask ChatGPT and they answer, of course I'll read it again and see if it makes sense. Sometimes they're not always right. So I'll keep inviting discussions, asking questions like that. Until finally I really get it, oh, so this is what you meant.
P8M	Yes, that's right. Before AI, I'd read the whole thing first. Then I'd underline, "Oh, that means this theme." But since AI has, I'll immediately give prompts about the theme of the text. What, that, that.

	So I get straight to the point. Sometimes I'll skim through it first. But sometimes, if I'm feeling lazy, I'll just ask the AI. It depends, if it's a long book, it's impossible to learn everything. You'll have to study several parts first. So, I'll ask what the first part is about. Then, for example, if I'm studying several paragraphs, I'll ask what this paragraph means. It depends. Sometimes I ask for help from other dictionaries. Sometimes I also ask the AI to simplify things, like simplifying things. Sometimes the AI also uses advanced English, right? Usually, it depends. If the table format already explains what I'm asking, then I can just use a table. If not, I ask it to explain it in a short paragraph list. Because a table is too short, so sometimes it's not clear. So I told them to elaborate, so I listed the paragraph. Then I copied it into Google Docs. Oh yeah, I've done it once. I've even created my own examples, like, I'd use a theory or story as an example, "Oh, so this is the conclusion, for example." But sometimes I feel hesitant, like it's too easy to use personal experiences as examples. So I try to come up with my own examples, then I ask if they relate to the theory or the paragraph. If so, then I use my example.
P6B	The topic is determined, yes, I decide it myself. Yes, but like before, I asked ChatGPT for help, like recommendations. So, beforehand, I brainstormed what the language would be about. To make things easier and save time, it shortened the time. After further chatting with ChatGPT, the topic idea emerged. Yes, I usually skim through the text first to get an idea of what it's about. I have. I've even sent books if I can. If I can't, I note down the title, publisher, and author. Usually, a summary comes up right away. After that, I read in more detail, and then look up the meaning of words I don't know. I translate them using an AI application called DeepL. Because DeepL has so many meanings, miss, before ChatGPT. ChatGPT uses sentences, but I use DeepL to write down the important points. I've done summaries in the form of lists, diagrams, and tables, but most often paragraph summaries. It saves time. If I need a summary of a book, I upload it. If not, I write down the title and the dance. I have. Why is the content like this? But my approach to that is more asking friends. Like asking friends for other references. If I find a reference that's not convincing enough, I ask this friend. Then, from this friend, I got a new reference. I reread that reference. I've definitely asked questions. ChatGPT provides an answer. Of course, I compare it with what I've experienced.
P6G	Yes, of course I open it first, then I read it, then I ask for it to be simplified. It's definitely us, but for me, there's definitely something that sticks. What does this mean, something like that. So I asked ChatGPT. Both of them, just interpreting and simplifying the language. I've tried looking it up in a dictionary and googling it before, but I think it's pretty easy to count. It's rare. I've had sentences, and I've had files too, sis. Yeah, it depends on what I don't understand. For me, because I have that binder, sis, I usually just jot down notes, jot down points, and then it depends on the time. If I have a long time, I take notes, take the points, and then work on the problem, or maybe I retype it, or I develop the language. But if it's really tight, really tight with the deadline, I usually ask, and then ChatGPT replaces it.
P4D	Well, the book is a reference for the content of the article. So I use ChatGPT to get a general idea of the book. Basically, it's like summarizing the book. I usually send the book directly, either in PDF format or sometimes I use a website link. Sometimes I just hand over the book and give instructions to summarize it. I've had a chance, so I'll just glance at the book and then, if I'm having trouble or it's too long, I'll go to ChatGPT. It's like, for example, there's text, and there's a word I don't understand. It has a meaning or it's really scientific. Well, that's because I'm curious, I want to know what this actually means. So, I give it to ChatGPT to explain what it means. But ChatGPT doesn't just explain the meaning, it also explains the intent, like its significance, or explains it in detail. So, besides translating, it also connects to the context of the word in this paragraph or topic. For that, I just copy and paste part of it, not the entire book. So, just the relevant

	sentence or paragraph. Yes, that's right. I did. Usually, I translate it first using Google Translate or something like that, DeepL. Well, sometimes the translation results from DeepL and Google Translate are different. Basically, translating in DeepL is more scientific, but Google Translate is more, what is it? Not so scientific. So I use ChatGPT to find out which one is correct, which one is suitable to use.
P4E	I have time, of course, I open it first and read it through. Then, there are some things I don't understand, and then I enter them. Usually, it's like, "This paragraph, this section, I screenshot it too. That's what it means." For example, the entire book. I sent all three of these books to him. Then, let's say I've found what I found, and there's a discussion session, as mentioned earlier. And, for example, I was discussing how to find a needs analysis in those three books. I try to tell him where to find the needs analysis section or something like that. Then, Gemini will give me book A in this section, book B in that section, book C in that section. Oh yeah, I think there's a page number, and the paragraph, and there's an explanation of the first sentence. That's for sure, so you can't just trust and understand it completely. So, when I finish searching, I find the answer on which page, which paragraph, and which sentence, and I don't double-check whether it's on that page, or on this or that page. I think, "Oh, right." It's understandable, but so far I haven't done enough to provide examples of implementation, such as the approach or needs analysis, so it's just the material, then the summary, and that's it.
P2C	Before I knew about ChatGPT, I searched on Google. Now, I ask for help finding articles and translations. Sometimes I provide screenshots, sometimes I even write a few sentences.
P2E	Because I struggle to understand after reading, because when I read English, I don't grasp the implied or explicit meaning. So I use it to illustrate the true meaning of the text. Actually, I have a few things that say, "Oh, this is what it means." Yes. The instruction is to find an article and then, like, a conclusion or lesson I learned from it. So, I read it first, and then, if I have a little understanding, I input it into Gemini. So, it depends on the lecturer's instructions, but currently, it's only for those who read articles. So, translate, Google, or a dictionary are for looking up words you don't know the meaning of. Gemini is for looking for the meaning, the entire sentence or paragraph.
3. When you are already satisfied with the response given by the generative AI chatbot, what do you do after with the assistance or response that you received? and why?	
P8C	Usually, I double-check. I read it again. After that, I usually have my own notes. I make bullet points. So I write down what ChatGPT says and what page it's on. So, next time, for example, if I want to look it up again, I can just go straight to that bullet point. Then, I make bullet points from the discussion with ChatGPT. So, if I need it again, I can just open my notebook. Same thing in my files. I usually also highlight it. I color it in. So when I need it, I don't have to go to ChatGPT again. I can just double-check. I can just read it again in the book. Oh, when I cross-check, it usually leads to a discussion, right? Is this what you mean? Yes, yes. Of course. Of course, I have. Because sometimes AI is things we don't get to, AI gets there. So, yes, of course I have. Not often, yes. But I've definitely cross-checked.
P8M	If you save it in a Google Doc, it doesn't automatically go to Google Doc. But I copy and paste it, then save it to my own Google Doc. There's a menu that lets you save it directly to Google Doc. And when I read it, I definitely read it all. So if there's something that doesn't match, I don't write it down. If it does, I will write it down. Then, if there's something I don't understand, I ask again what it means. So I really double-check, not just copy-paste.
P6B	First, I asked for a summary of the conversation, making it more concise and detailed. I did that. Then, I saved the answer. I immediately moved it to Google Docs. I immediately moved it to one drive, if the assignment was to be one. One drive, then I saved it in Google Docs.

P6G	Oh, this is it, to make sure it's like I make sure of the journal links myself, like searching for it myself on Google. If you make sure you don't go to ChatGPT again. If you don't understand, it's like the ChatGPT answer doesn't match the meaning, especially if the ChatGPT answer is wrong, and usually the ChatGPT answer is also inconsequential, you know, it doesn't match the data or something like that. I'm angry. Don't you know the latest data? Then he must have apologized after that, gave me the data again If it's not correct, then I really don't tell you to fix it like that. Yes, I really didn't ask, the prompt wasn't that detailed anymore, you know.
P4D	Usually, I ask for a summary of the conversation, then, what do I do? I save the summary to Google Docs or something. I don't just copy and paste the summary into an article, but I paraphrase it manually first. I've done that, more than twice, to make sure. I've done that, I guess, quite often. Because, I understand the answer from the CGPT. Then, if I understand it, I double-check with the CGPT to see if it's like this, or if it's true.
P4E	That's right, after searching and searching. I've found a satisfactory answer. I usually save it in my own WhatsApp chat, so I don't have to keep going back and forth to the gym, because the answer is already there, for example, "Okay, I'll save this here and then I'll study it there, I'll improve it there, I'll create a new sentence that doesn't match the AI there, like that. I have, I have. Is the sentence appropriate or not, is the language appropriate or not? And the point is, is it correct or not? I think it's really like that, okay?
P2C	Usually, if the answer is satisfactory, I double-check it, then if... I paraphrase it. I paraphrase it into my own language, which means the same, similar, or something like that. No. I still use Indonesian. But sometimes the words in GPT might be inappropriate or too formal, so it's better to change them to simpler language. Double-checking my understanding. I reread the article, then I check whether the answer aligns with the assignment question. If I have trouble, I might ask a friend for help. If I really can't, I ask GhatGPT or another tool, like Google Translate and Gemini.
P2E	Once I'm satisfied, I read it in English and then ask for the Indonesian version so it's easier to understand. Oh, about that, I've heard of that phrase before, like the analogy of a fish swimming in the ocean. Well, in English, Gemini said, "Why is the fish big?" So, the fish is big, not the ocean. Then I gave this feedback. "Why did I ask earlier, for example, if the fish is small, the ocean is big?" So Gemini gave me an idiom, and then I asked, "Why doesn't it match what I meant?" Then she explained that it's an idiom. Yes, for example, Gemini gave me a lot, so I'm not jumping to conclusions, but shortening the sentence, Miss.

SEM-STRUCTURED INTERVIEW RESULT					
EFL Undergraduate Students' Reason for Using Generative AI Chatbot in Their Reading					
No	Theme	Sub-Theme	Code	Participants	
1.	Need for Easier Reading (2)	Understand Easier	a	P02, P04, P06	
		Navigate Reading Difficulties	e	P02, P04, P05, P06	
		Save Time Reading	g	P02, P04, P05, P06	
2.	Need for Quicker Reading	Portable to Use	g	P04, P05, P06	
		Language Personalization	d	P02, P05, P06	
		Personalization Setting	f	P02, P05, P06	
3.	Flexibility (3)	Application Integration	a	P04, P05, P06	
		Clear Source Attribution	b	P04, P05, P06	
		Clear Source Attribution (1)			
4.	Clear Source Attribution (1)				
Students' Implementation of Reading Comprehension Strategy through Generative AI Chatbot-Mediated Reading					
No	Theme	Sub-Theme	Code	Participants	
1.	Overcoming and Summarizing Strategy (2)	Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
2.	Determining Meaning Strategy (1)	Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	
		Read the text carefully before using the AI	h	P02, P05, P06	

Appendix 3: Surat Validasi Research Instrument

SURAT VALIDASI

Setelah membaca dan menelaah lebih lanjut mengenai instrumen *Questionnaire* dan *Interview Guideline* pada bimbingan skripsi mahasiswa oleh:

Nama : Alya Hanun Putri Wibowo
 NIM : 06020522030
 Prodi : Pendidikan Bahasa Inggris
 Judul : EFL Undergraduate Students' Use of Generative AI Chatbots To Facilitate Reading Comprehension

Dengan ini saya,
 Nama : H. Mokhamad Syaifudin, M.Ed., Ph.D
 Pekerjaan : Dosen

Menyatakan telah melakukan konsultasi dan telah melakukan pengkajian, maka kami memberi saran-saran sebagai berikut:

☐ Bisa tanpa revisi ☒ Bisa dengan revisi ☐ Tidak bisa digunakan

1. Silahkan direvisi dengan penyesuaian dan hasil diskusi

2. Sebaiknya Catatan

Dan instrumen ini selanjutnya kami nyatakan valid dan bisa digunakan dalam penelitian.

Surabaya, 3 Februari 2026
 Validator,


H. Mokhamad Syaifudin, M.Ed., Ph.D

☐ Beri tanda cek (✓)

Appendix 4: Surat Tugas Dosen Pembimbing



**KEMENTERIAN AGAMA REPUBLIK INDONESIA
UNIVERSITAS ISLAM NEGERI SUNAN AMPEL SURABAYA
FAKULTAS TARBIYAH DAN KEGURUAN**

Jl. Jend. A. Yani 117 Surabaya 60237
Telp. (031) 8437893, Website : <http://rik.uinsby.ac.id>

SURAT TUGAS

Nomor : B- 7891 /Un.07/04/D/PP.00.9/ /2025

Menimbang : a. bahwa untuk meningkatkan kelancaran pelaksanaan ujian/munaqosah skripsi mahasiswa maka perlu memberikan tugas kepada dosen untuk membimbing skripsi pada mahasiswa.

b. bahwa berdasarkan pertimbangan sebagaimana dimaksud dalam huruf a, maka perlu menugaskan nama-nama dosen pembimbing.

Dasar : Keputusan Rektor UIN Sunan Ampel Surabaya nomor 961 Tahun 2023 tentang Pedoman Akademik Program Sarjana, Magister, dan Doktor Tahun 2023 UIN Sunan Ampel Surabaya

MEMBERI TUGAS

Kepada : 1. Nama : Hilda Izzati Madjid, MA
NIP : 198602102011012012

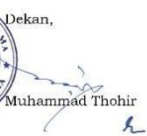
2. Nama : Fahmy Imaniar, M.Pd
NIP : 199410082020122019

Untuk : Membimbing skripsi Mahasiswa :
Nama : Alya Hanun Putri Wibowo
NIM : 06020522030
Judul Skripsi : Efl Students' Use Of Generative Ai Chatbots As A Tool To Facilitate Reading Comprehension
Prodi : Pendidikan Bahasa Inggris

pada semester Gasal tahun akademik 2025/2026 mulai tanggal, 20 Agustus 2025.
Harap dilaksanakan dengan sebaik-baiknya.

Surabaya, 20 Agustus 2025.

Dekan,

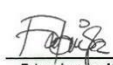


Muhammad Thohir

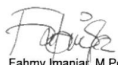
Tembusan:
- Ketua Program Studi;
- Yang bersangkutan.



Appendix 5: [Approval Sheet of Thesis Proposal](#)

 UIN SUNAN AMPEL SURABAYA	FORMULIR PERSETUJUAN PEMBIMBING UNTUK MUNAQOSAH PROPOSAL	No Dokumen	FM/52/GKM/12/PTK-UINSA
		Revisi	0
		Tanggal Terbit	29-Apr-16
		Halaman	2 dari 5
Hari/Tanggal		Kamis / 23 Oktober 2025	
Nama Mahasiswa		Alya Hanun Putri Wibowo	
NIM		06020522030	
Judul Skripsi	EFL UNDERGRADUATE STUDENTS' USE OF GENERATIVE AI CHATBOTS TO FACILITATE READING COMPREHENSION		
Pembimbing telah menyetujui isi proposal, menyatakan sesuai panduan skripsi dan layak untuk diajukan dalam munaqosah seminar proposal			
Pembimbing I	28/10/2025  Hilda Izzah Madiq, M.A.		
Pembimbing II	2/11/2025  Fahmy Imaniar, M.Pd.		
Formulir setelah ditandatangani pembimbing diserahkan ke JFU Jurusan/Prodi			
Cek list dokumen	Dokumen proposal Skripsi rangkap 3 (lengkap/tidak lengkap)* coret tidak perlu		
Diterima oleh JFU	Nama		
Waktu	Tanggal..... Bulan..... Tahun.....		
paraf JFU prodi/jurusan			
form 1.2.PPMPS	1 Asli untuk Dosen 2 Copy untuk Fungsional Umum Jurusan/Program Studi/Akademik		

Appendix 6: Approval Sheet of Thesis

 UIN SUNAN AMPEL SURABAYA	FORMULIR PERSETUJUAN PEMBIMBING UNTUK MUNAQSAH SKRIPSI	No Dokumen	FM05/GKM/12P7KAUNSA
		Revisi	0
		Tanggal Terbit	29-Apr-16
		Halaman	3 dari 5
Hari/Tanggal		Rabu / 13 Mei 2026	
Nama Mahasiswa		Alya Hanun Putri Wibowo	
NIM		06020522030	
Judul Skripsi	EFL UNDERGRADUATE STUDENTS' USE OF GENERATIVE AI CHATBOTS TO FACILITATE READING COMPREHENSION		
Pembimbing telah menyetujui isi proposal, menyatakan sesuai panduan skripsi dan layak untuk diajukan dalam munaqsaah skripsi			
Pembimbing I	20/05/2026  Hilda Izzati Madiid, MA NIP. 198602102011012012		
Pembimbing II	 Fahmy Imanial, M.Pd NIP. 199410082020122019		
Formulir setelah ditandatangani pembimbing diserahkan ke JFU Jurusan/Prodi			
Cek list dokumen	Dokumen Skripsi rangkap 4 (lengkap/tidak lengkap)* coret tidak perlu		
Diterima oleh JFU	Nama		
Waktu	Tanggal.....Bulan.....Tahun.....		
paraf JFU prodi/jurusan			
form 1,2,PPMPS	1 Asli untuk Dosen 2 Copy untuk Fungsional Umum Jurusan/Program Studi/Akademik		